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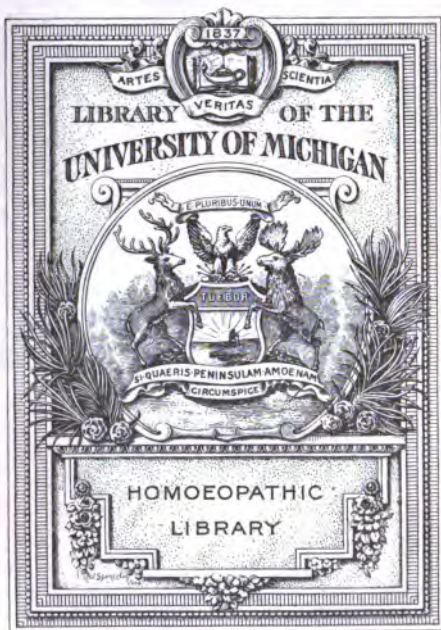
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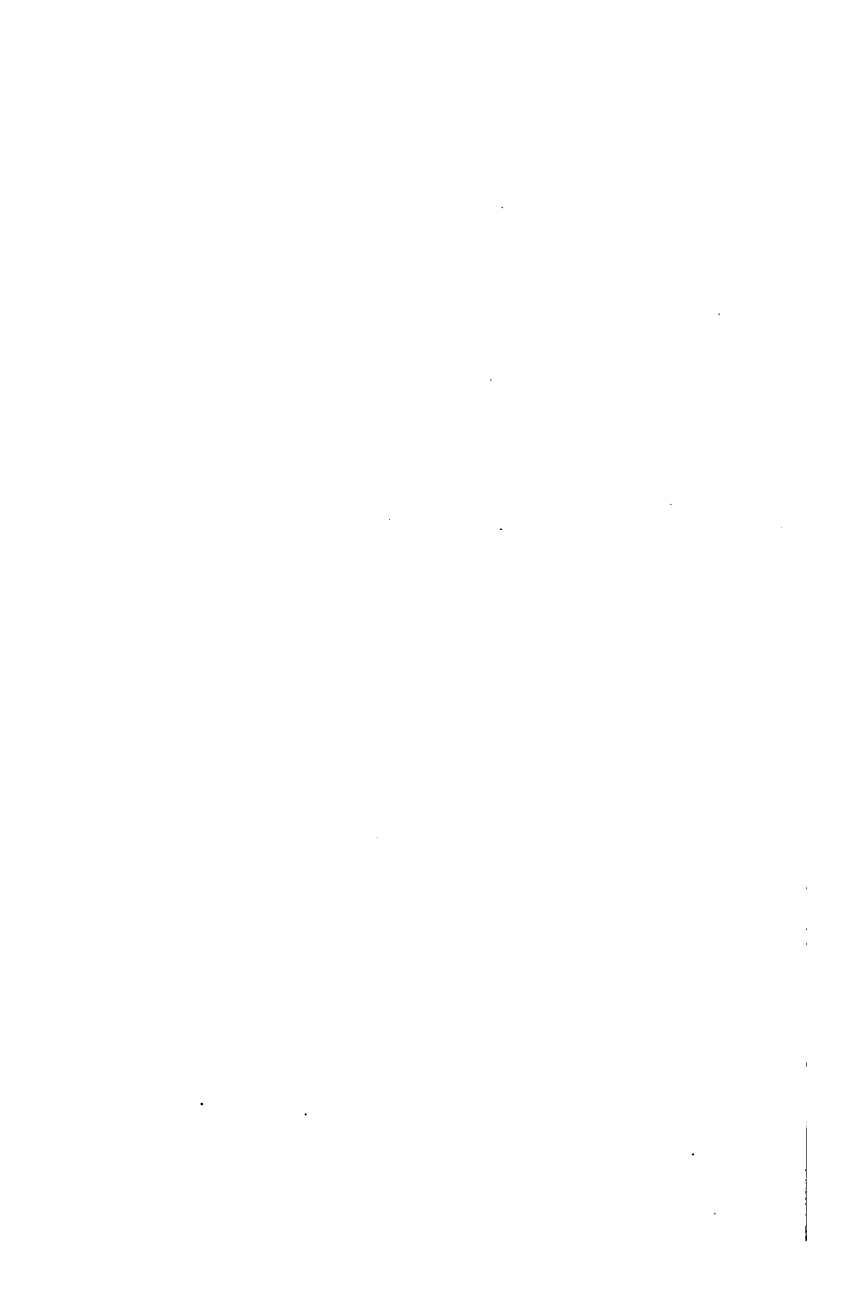
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COMPANION
TO THE
BRITISH AND AMERICAN
HOMŒOPATHIC PHARMACOPŒIAS
ARRANGED AS A
DICTIONARY,
FOURTH EDITION.



COMPANION
TO THE
BRITISH AND AMERICAN
HOMŒOPATHIC PHARMACOPŒIAS

ARRANGED IN THE FORM OF A
DICTIONARY

BY
LAWRENCE T. ASHWELL

FOURTH EDITION

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PREFACE

TO

THE FOURTH EDITION.

THE third edition of the Companion to the British and American Homœopathic Pharmacopœias being exhausted, in compiling a fourth I have endeavoured to improve it as much as possible.

Many of the processes, characters, and tests given in the third and last edition of the British Homœopathic Pharmacopœia consist of reprints from the British Pharmacopœia of 1867, but a new edition of the latter work having been published with many additions, corrections, and alterations of processes, symbolic formulæ, &c., the corresponding corrections and alterations have been made in this work, bringing the "Companion" up to date without altering in any way the general plan of the book; and in conclusion Chemists will find this a handy manual, giving them all the information necessary for the preparation and dispensing of drugs peculiar to Homœopathic Pharmacy.

74, NEW BOND STREET, LONDON,
September, 1890.

326305



P R E F A C E

TO

T H E T H I R D E D I T I O N .

ENCOURAGED by the success attending the sale of the first and second editions, I have endeavoured as far as possible to improve the third, and to this end have entirely re-written the article on tincture-making.

The quantity of rectified spirit and water used in the preparation of fresh plant tinctures is given in minims, and placed separately, that being considered the most convenient method, for it has always appeared to me that to express them by decimal parts of an ounce occasions unnecessary labour, besides the possibility of error, when converting them to measure. Owing to the kindness of Dr. Redwood, who has placed at my disposal anything he has published on the subject of tincture-making, I have been enabled to collect a vast amount of information that will, I feel sure, be of great service to Homœopathic Chemists, or to those who prepare tinctures of any kind.

74, NEW BOND STREET, LONDON,
May, 1884.

PREFACE

TO

THE SECOND EDITION.

THE first edition was sold in the short space of twelve months, and before commencing a new issue, it was necessary to wait for the latest Homœopathic Pharmacopœia, which was duly received at the beginning of the present year. On perusing that work it was satisfactory to note the suggestions, made in the "Companion," to medicate pilules with proof spirit tinctures, and the addition of water to the pilules before medication with strong spirit tinctures, had been adopted by the Pharmacopœia Committee. Tincture-triturations are also now official in the B.H.P., but if prepared as directed, one grain will not represent one minim, except in the case of attenuations. Correct instructions are given, however, in the present work.

Since the first edition of the "Companion" was published a new American Homœopathic Pharmacopœia has appeared. In this work tinctures are prepared by the Hahnemannian method, which by many is accepted as the better of the two. The British system, however, is considered the most scientific and uniform, and should always be adopted in this country. The directions for

making American tinctures are given on page 11, and after each remedy reference is made according to which class it should be prepared.

Considerable trouble has been taken in collecting information with reference to the source from which fresh plants should be collected, and some interesting facts will be found on page 191.

In this edition the British Pharmacopœia doses are given whenever the medicine is the same as that used in ordinary practice, the object being to indicate the nature of the drug—*i.e.*, whether it is more or less poisonous. Reference has been frequently made to Squire's "Companion to the British Pharmacopœia," and much valuable information obtained therefrom.

In conclusion, the "Companion" will meet the wants of those for whom it has been compiled—*viz.*, Chemists who require an inexpensive work giving some information respecting homœopathic medicines and pharmacy. This edition has been made as complete as possible, much information being added in the way of tests, &c. Where the characters and tests are the same as the B.P. they are left out, since every Pharmacist possesses that work.

74, NEW BOND STREET, LONDON,
July, 1883.

**SYMBOLS AND EQUIVALENT WEIGHTS OF
THE ELEMENTARY BODIES MENTIONED IN THE
BRITISH HOMŒOPATHIC PHARMACOPŒIA.**

Elementary Bodies.	Symbols and Equivalents.
Aluminium	Al = 27
Antimony (Stibium)	Sb = 120
Arsenic	As = 75
Barium	Ba = 137
Bismuth	Bi = 209
Boron	B = 11
Bromine	Br = 80
Cadmium	Cd = 112
Calcium	Ca = 40
Carbon	C = 12
Cerium	Ce = 141
Chlorine	Cl = 35·5
Chromium	Cr = 52·5
Cobalt	Co = 59
Copper (Cuprum)	Cu = 63·4
Fluorine	F = 19
Gold (Aurum)	Au = 196·5
Hydrogen	H = 1
Iodine	I = 127
Iridium	Ir = 198
Iron (Ferrum)	Fe = 56
Lead (Plumbum)	Pb = 207
Lithium	L = 7
Magnesium	Mg = 24
Manganese	Mn = 55
Mercury (Hydrargyrum)	Hg = 200
Nickel	Ni = 59
Nitrogen	N = 14
Osmium	Os = 199

Elementary Bodies.	Symbols and Equivalents.
Oxygen	O = 16
Palladium	Pd = 106.5
Phosphorus	P = 31
Platinum	Pt = 195
Potassium (Kalium)	K = 39
Selenium	Se = 79.1
Silicon	Si = 28
Silver (Argentum)	Ag = 108
Sodium (Natrium).	Na = 23
Strontium	Sr = 87.6
Sulphur	S = 32
Tellurium	Te = 129
Tin (Stannum)	Sn = 118
Titanium	Ti = 50
Uranium	U = 240
Zinc	Zn = 65

WEIGHTS AND MEASURES USED IN THE HOMŒOPATHIC PHARMACOPŒIA.

WEIGHTS.

1 Grain	gr.	
1 Ounce	oz.	= 437.5 grains.
1 Pound	lb.	= 16 ounces. = 7000 „

MEASURES OF CAPACITY.

1 Minim	min.	℥	
1 Fluid Drachm	fl. drm.	<i>f</i> 3	= 60 minims.
1 Fluid ounce	fl. oz.	<i>f</i> 3	= 8 fluid drachms.
1 Pint	O.		= 20 fluid ounces.
1 Gallon	C.		= 8 pints.

MEASURES OF LENGTH.

1 line	= $\frac{1}{12}$ inch.
1 inch	= $\frac{1}{39.133}$ seconds pendulum.
12 „	= 1 foot.
36 „	= 3 feet = 1 yard.

RELATION OF MEASURES TO WEIGHTS.

			Grains of water.
1 Minim is the measure of			0·9114583
1 Fluid Drachm	"		54·6875
1 Fluid Ounce	"	1 ounce	or 437·5
1 Pint	"	1·25 pounds	or 8750·0
1 Gallon	"	10 pounds	or 70,000·0

WEIGHTS AND MEASURES OF THE METRICAL SYSTEM.

WEIGHTS.

		Gramme.
1 Milligramme	= the thousandth part of 1 gramme	or 0·001
1 Centigramme	= the hundredth	" 0·01
1 Decigramme	= the tenth	" 0·1
1 Gramme	= weight of a cubic centimetre of water at 4° C.	} 1·0
1 Decagramme	= ten grammes	10·0
1 Hectogramme	= one hundred grammes	100·0
1 Kilogramme	= one thousand grammes	1000·0

MEASURES OF CAPACITY.

			Grm. of water.
1 Millilitre	=	1 cub. centimetre or the measure of 1	
1 Centilitre	=	10 " "	10
1 Decilitre	=	100 " "	100
1 Litre	=	1000 " "	1000, or 1 Kilo.

MEASURES OF LENGTH.

			Metre.
1 Millimetre	=	the thousandth part of 1 metre	or 0·001
1 Centimetre	=	the hundredth " "	0·01
1 Decimetre	=	the tenth " "	0·1
1 Metre	=		1·0

RELATION OF THE WEIGHTS OF THE BRITISH
PHARMACOPŒIA TO THE METRICAL WEIGHTS.

1 Pound	=	453·5927 grammes.
1 Ounce	=	28·3495 „
1 Grain	=	0·0648 „

RELATION OF MEASURES OF CAPACITY OF THE
BRITISH PHARMACOPŒIA TO THE
METRICAL MEASURES.

	Litres.		Cubic centimetres.
1 Gallon	=	4·543458	
1 Pint	=	0·567932	or 567·932
1 Fluid Ounce	=	0·028397	28·397
1 Fluid Drachm	=	0·003550	3·550
1 Minim	=	0·000059	0·059

RELATION OF THE METRICAL WEIGHTS TO THE
WEIGHTS OF THE BRITISH PHARMACOPŒIA.

		Grains.
1 Milligramme	= 0·015432
1 Centigramme	= 0·15432
1 Decigramme	= 1·5432
1 Gramme	= 15·432
1 Kilogramme	= 2 lbs. 3 oz. 119·8 grs. or 15432·349	

RELATION OF THE METRICAL MEASURES TO THE
MEASURES OF THE BRITISH PHARMACOPŒIA.

1 Millimetre	=	0·03937 inches.
1 Centimetre	=	0·39371 „
1 Decimetre	=	3·93708 „
1 Metre	=	39·37079 „ or 1 yard 3·37 inches.
1 Cubic centimetre	=	15·432 grains.*
1 Litre	=	1·76077 pint or 1 pint 15 ozs. 1 dr. 43 m.

* The cubic centimetre is a standard at 4° C. (39° 2 F.), the grain at 62° F. (16° 66 C.).

INTRODUCTION, AND GENERAL DIRECTIONS IN HOMŒOPATHIC PHARMACY.

THE preparations and processes used in Homœopathic practice are, with few exceptions, of a simple nature; at the same time each preparation will require conscientious accuracy from the operator, who should be well versed in the details of General Pharmacy. After such a training he will be able, provided he will honestly carry out the directions in this work, to prepare and dispense the medicines to meet the requirements of the Homœopathic practitioner. In the following pages, therefore, it will be assumed that the reader has a knowledge of laboratory work, also of Botany, Chemistry, Materia Medica, Dispensing, &c., and has passed the examinations of the Pharmaceutical Society; indeed without the latter qualification he will not be allowed to call himself a Homœopathic chemist, or to sell and dispense poisons.

The preparations recognized in Homœopathic Pharmacy are,—

Solutions in Alcohol (Tincturæ).

Solutions in Water (Liquores).

Solutions in Ether, Syrup or Glycerine.

Triturations (Attenuations with Sugar of Milk).

Attenuations (liquid attenuations).

Pilules (sugar pellets saturated with tincture).

Globules (very small sugar pellets saturated with tincture, now seldom used).

All preparations containing less of the crude material than the strongest officinal preparation are called *Attenuations*.

The terms *Dilutions* and *Potencies* are sometimes used, but are gradually falling into disuse.

These are fully described in the Dictionary, as are the following *menstrua* used in their preparation,—

Ether (*Æther*), Absolute Alcohol (*Alcohol Ethylicum*), Distilled Water (*Aqua Destillata*), Glycerine (*Glycerinum*), Rectified Spirit (*Spiritus Rectificatus*), Sugar of Milk (*Saccharum Lactis*), and simple Syrup (*Syrupus*).

Although Hahnemann did not generally recommend external applications, yet it is well to provide chemists with directions for preparing some of the remedies in the form of ointments, plasters, glyceroles, injections, lotions, liniments, opodeldocs, &c.; and these also will be found, with the *menstrua* used in their preparation, in the Dictionary.

GENERAL RULES.

Avoid everything that will in the least affect the purity of the drugs to be used in Homœopathic Pharmacy; such as strong light, smoke, odours, dust, &c.

All strong-smelling drugs used in homœopathic practice, such as musk and camphor, should be kept strictly apart from other preparations.

The medicines when attenuated should be carefully stored in boxes or drawers, and these can be conveniently arranged in a recess. A good plan is to have a nest of say 144 small drawers containing the common remedies; each drawer holding a separate medicine in the following degrees, either in two-dram or half-oz. bottles:—1x, 2x, 5x, 5 cent. (10x), 11 cent. (22x), 29, 99, and 199. Where the drug is first attenuated by trituration, No. 4 (8x) will be the first liquid degree. For uncommon remedies, drawers holding say 100 bottles might be used, each drawer to contain the similar attenuation of different drugs, so that about a dozen drawers would be required, one for the 1x, one for 2x, 5x, &c. All the common triturations are best stored in a cupboard in wide-mouthed bottles holding from 2 to 8 or 16 ozs., according to the demand. The uncommon ones being seldom required, may be stored in drawers in much smaller quantities. The bulk of the mother tinctures should be kept at an even temperature of about 60° F.

All bottles should be new, and carefully washed and dried. After washing in the ordinary way with a brush, it is well to rinse each one with an ascending stream of water, and allow the bottles to dry by standing them upside down in a porcelain tray with holes in the bottom similar to a cullender, or they may be dried at a high temperature. Glass-stoppered bottles should be used for corrosive medicines, and actinic glass should be used where the contents might be affected by light.

Corks must be of the finest quality, and on no account should a cork be used if it has ever been in contact with another medicine. Mortars made of Wedgwood-ware are the best, and each drug such as mercury, tin, iron, &c., should have a separate one devoted to that medicine only.

Only bone or ivory spatulas may be used.

The tincture-press must be most carefully washed after each tincture has been made.

Fresh plants.—Prepare your tincture as soon as possible after receiving or collecting the plant, and reject any part that shows the least symptom of decay. As the time for collecting will be found under each remedy in the Dictionary, it will be unnecessary to give here any general rule upon that head. Tinctures from animal products also must be prepared while the materials are fresh.

Buy all chemicals from a reliable source, and test each in case of doubt as to its reliability or purity.

The general directions of the American Homœopathic Pharmacopœia are much the same as the British, and need not be reproduced in this work. All we consider necessary is to give the information requisite for the preparation of medicines on their system, which differs considerably from ours. After each remedy in the Dictionary reference is made to the American Homœopathic Pharmacopœia, thus: Am. H.P.—Tincture and dilutions prepared as Class II., or trituration as Class VII.; &c. The chemist must then turn to the following pages, and, by reference to that particular Class, he will at once see how the medicine is prepared in America. It will be seen in nearly all cases they adopt the method devised and carried out by Hahnemann, but by many the British plan is considered more scientific and uniform, and should always be adopted in this country, except where the medicine is ordered

to be prepared according to the American Homœopathic Pharmacopœia.

PROPORTIONS OF MEASURE AND WEIGHT IN THE PREPARATION OF TINCTURES, SOLUTIONS, POTENCIES, AND TRITURATIONS OF THE AMERICAN HOMŒOPATHIC PHARMACOPŒIA.

The proportion of measure and weight, employed in the preparation of tinctures, solutions, potencies and triturations, for the sake of more convenient reference are arranged in nine classes, to which attention is called under each medicine.

CLASS I.

TINCTURES.

Tinctures prepared with equal parts by weight of juice and alcohol.

The fundamental rule for this class is contained in Hahnemann's "Mat. Med. Pura," under BELLADONNA.

The freshly-gathered plant, or part thereof, chopped and pounded to a pulp, is pressed out in a piece of new linen. The expressed juice is then, by brisk agitation, mingled with an equal part by weight of alcohol. This mixture is allowed to stand eight days in a well-stoppered bottle, in a dark, cool place, and then filtered.

Amount of drug power of tincture, $\frac{1}{2}$.

POTENTIATION.

a. Centesimal Scale.

2 minims of tincture and 98 minims of dilute alcohol give the 1st potency.

1 minim of the 1st potency and 99 minims of alcohol give the 2nd potency.

All following potencies are prepared with one minim of the preceding potency to ninety-nine minims of alcohol.

b. Decimal Scale.

2 minims of tincture and 8 minims of dilute alcohol give the 1x potency.

1 minim of the 1x potency and 9 minims of dilute alcohol give the 2x potency.

1 minim of the 2x potency and 9 minims of alcohol give the 3x potency.

All following potencies are prepared with one minim of the preceding potency to nine minims of alcohol.

CLASS II.

TINCTURES.

Tinctures expressed by the aid of two parts of alcohol added to three parts of plant or part thereof.

The fundamental rule for this class is contained in Hahnemann's "Med. Mat. Pura," under THUYA.

The finely-chopped, fresh plant, or part thereof, is weighed. To every three parts, two parts by weight of alcohol are taken. Then the chopped plant is moistened with as much alcohol as is necessary to bring the mass to a thick pulp and is well stirred. Adding the rest of the alcohol, the whole is mixed together and strained through a piece of new linen. The tincture thus obtained is allowed to stand eight days in a well-stoppered bottle, in a dark, cool place, and then filtered.

Amount of drug power of tincture, $\frac{1}{3}$.

POTENTIATION.

a. Centesimal Scale.

2 minims of tincture and 98 minims of dilute alcohol give the 1st potency.

1 minim of the 1st potency and 99 minims of alcohol give the 2nd potency.

All following potencies are prepared with one minim of the preceding potency to ninety-nine minims of alcohol.

b. Decimal Scale.

2 minims of tincture and 8 minims of dilute alcohol give the 1x potency.

1 minim of the 1x potency, and 9 minims of dilute alcohol give the 2x potency.

1 minim of the $2x$ potency and 9 minims of dilute alcohol give the $3x$ potency.

All following potencies are prepared with one minim of the preceding potency to nine minims of alcohol.

CLASS III.

TINCTURES.

Tinctures prepared with two parts by weight of alcohol to one part of plant, or part thereof.

The fundamental rule for this class is contained in Hahnemann's "Mat. Med. Pura," under *SCILLA*.

The fresh plant, or part thereof, is pounded to a fine pulp and weighed. Then two parts by weight of alcohol are taken, and after thoroughly mixing the pulp with one-sixth part of it, the rest of the alcohol is added. After having stirred the whole, and having filled it into a well-stoppered bottle, it is allowed to stand eight days, in a dark, cool place. The tincture is then separated by decanting, straining and filtering.

Amount of drug power of tincture, $\frac{1}{3}$.

POTENTIATION.

a. Centesimal Scale.

6 minims of tincture and 94 minims of dilute alcohol give the 1st potency.

1 minim of the 1st potency and 99 minims of alcohol give the 2nd potency.

All following potencies are prepared with one minim of the preceding potency to ninety-nine minims of alcohol.

b. Decimal Scale.

6 minims of tincture and 4 minims of dilute alcohol give the $1x$ potency.

1 minim of the $1x$ potency and 9 minims of dilute alcohol give the $2x$ potency.

1 minim of the $2x$ potency and 9 minims of alcohol give the $3x$ potency.

All following potencies are prepared with one minim of the preceding potency to nine minims of alcohol.

CLASS IV.

TINCTURES.

Tinctures prepared with five parts by weight of alcohol.

The fundamental rule for this class is contained in Hahnemann's "Mat. Med. Pura," under SPIGELIA and STAPHISAGRIA.

Weigh the finely divided substance (dried vegetables and animals are pulverized, fresh animals are pounded), and pour over it five parts by weight of alcohol, then let it remain eight days (provided that for the particular medicine a longer maceration is not required), at ordinary temperature in a dark place, shaking it twice a day; then pour off, strain and filter.

Amount of drug power of tincture, $\frac{1}{10}$.

POTENTIATION.

a. Centesimal Scale.

10 minims of tincture and 90 minims of alcohol give the 1st potency.

1 minim of the 1st potency and 90 minims of alcohol give the 2nd potency.

All following potencies are prepared with one minim of the preceding potency to ninety-nine minims of alcohol.

b. Decimal Scale.

As the tincture contains $\frac{1}{10}$ drug power, it corresponds to the 1x potency.

1 minim of tincture and 9 minims of alcohol give the 2x potency.

All following potencies are prepared with one minim of the preceding potency to nine minims of alcohol.

CLASS V.—a.

AQUEOUS SOLUTIONS.

One part by weight of the medicinal substance is dissolved in nine parts by weight of distilled water.

Amount of drug power of solution, $\frac{1}{10}$.

POTENTIATION.

a. Centesimal Scale.

10 minims of the solution and 90 minims of distilled water give the 1st potency.

1 minim of the 1st potency and 99 minims of alcohol give the 2nd potency.

All following potencies are prepared with one minim of the preceding potency to ninety-nine minims of alcohol.

b. Decimal Scale.

As the solution contains $\frac{1}{10}$ drug power, it corresponds to the 1x potency.

1 minim of the solution and 9 minims of distilled water give the 2x potency.

1 minim of the 2x potency and 9 minims of dilute alcohol give the 3x potency.

1 minim of the 3x potency and 9 minims of alcohol give the 4x potency.

All following potencies are prepared with one minim of the preceding potency to nine minims of alcohol.

CLASS V.—β.

AQUEOUS SOLUTIONS.

One part by weight of the medicinal substance is dissolved in ninety-nine parts by weight of distilled water.

Amount of drug power of solution, $\frac{1}{100}$.

POTENTIATION.

a. Centesimal Scale.

As the solution contains $\frac{1}{100}$ drug power, it corresponds to the 1st potency.

1 minim of the solution and 99 minims of alcohol give the 2nd potency.

All following potencies are prepared with one minim of the preceding potency to ninety-nine minims of alcohol.

b. Decimal Scale.

As the solution contains $\frac{1}{100}$ drug power, it corresponds to the $2x$ potency.

1 minim of the solution and 9 minims of dilute alcohol give the $3x$ potency.

1 minim of the $3x$ potency and 9 minims of alcohol give the $4x$ potency.

All following potencies are prepared with one minim of the preceding potency to nine minims of alcohol.

CLASS VI.—*a.*

ALCOHOLIC SOLUTIONS.

Two parts by weight of substance to nine parts by weight of alcohol.

The fundamental rule for this class is contained in Hahnemann's "Mat. Med. Pura," under GUAIACUM.

Two parts by weight of the medicinal substance are dissolved in nine parts by weight of alcohol.

Amount of drug power of solution, $\frac{1}{10}$.

POTENTIATION.

a. Centesimal Scale.

10 minims of the solution and 90 minims of alcohol give the 1st potency.

1 minim of the 1st potency and 99 minims of alcohol give the 2nd potency.

All following potencies are prepared with one minim of the preceding potency to ninety-nine minims of alcohol.

b. Decimal Scale.

As the solution contains $\frac{1}{10}$ drug power, it corresponds to the $1x$ potency.

1 minim of the solution and 9 minims of alcohol give the $2x$ potency.

All following potencies are prepared with one minim of the preceding potency to nine minims of alcohol.

CLASS VI.—*β*.

ALCOHOLIC SOLUTIONS.

One part by weight of the medicinal substance is dissolved in fifty parts by weight of alcohol.

Amount of drug power of solution, $\frac{1}{100}$.

POTENTIATION.

a. Centesimal Scale.

As the solution contains $\frac{1}{100}$ drug power, it corresponds to the 1st potency.

1 minim of the solution and 99 minims of alcohol give the 2nd potency.

All following potencies are prepared with one minim of the preceding potency to ninety-nine minims of alcohol.

b. Decimal Scale.

As the solution contains $\frac{1}{100}$ drug power, it corresponds to the 2 α potency.

1 minim of the solution and 9 minims of alcohol give the 3 α potency.

All following potencies are prepared with one minim of the preceding potency to nine minims of alcohol.

CLASS VII.

TRITURATION OF DRY MEDICINAL SUBSTANCES.

The fundamental rule for this class is contained in Hahnemann's "Mat. Med. Pura," under ARSENICUM.

For the trituration and potentiation of dry medicinal substances the following proportions of weight and measure form the basis :

a. Centesimal Scale.

One part by weight of the medicinal substance to 99 parts by weight of sugar of milk gives the 1st trituration.

All following triturations are prepared with one grain of the preceding trituration to ninety-nine grains of sugar of milk.

Conversion into Liquid Potencies.

One grain of the 3rd trituration dissolved in 50 minims of distilled water and mixed with 50 minims of alcohol gives the 4th potency.

1 minim of the 4th potency to 99 minims of alcohol gives the 5th potency.

All following potencies are prepared with one minim of the preceding potency to ninety-nine minims of alcohol.

b. Decimal Scale.

One part by weight of the medicinal substance to 9 parts by weight of sugar of milk gives the 1x trituration.

All following triturations are prepared with one grain of the preceding trituration to nine grains of sugar of milk.

Conversion into Liquid Potencies.

One grain of the 6x trituration dissolved in 50 minims of distilled water, and mixed with 50 minims of alcohol, gives the 8x potency.

1 minim of the 8x potency to 9 minims of dilute alcohol gives the 9x potency.

1 minim of the 9x potency to 9 minims of alcohol gives the 10x potency.

All following potencies are prepared with one minim of the preceding potency to ninety minims of alcohol.

CLASS VIII.

TRITURATION OF LIQUID SUBSTANCES.

The rule for this class is contained in Hahnemann's "Chronic Diseases," under PETROLEUM.

For the trituration of these substances the following proportions of weight and measure form the basis :

a. Centesimal Scale.

One minim of the substance to 99 grains of sugar of milk gives the 1st trituration.

1 part by weight of the 1st trituration to 99 parts by weight of sugar of milk gives the 2nd trituration.

All following triturations are prepared with one grain of the preceding trituration to ninety-nine grains of sugar of milk.

Conversion into Liquid Potencies.

One grain of the 3rd trituration dissolved in 50 minims of distilled water, and mixed with 50 minims of alcohol gives the 4th potency.

1 minim of the 4th potency to 99 minims of alcohol gives the 5th potency.

All following potencies are prepared with one minim of the preceding potency to ninety-nine minims of alcohol.

b. Decimal Scale.

1 minim of the substance to 9 grains of sugar of milk gives the 1x trituration.

1 part by weight of the 1x trituration to 9 parts by weight of sugar of milk gives the 2x trituration.

All following triturations are prepared with one grain of the preceding trituration to nine grains of sugar of milk.

Conversion into Liquid Potencies.

One grain of the 6x trituration dissolved in 50 minims of distilled water, and mixed with 50 minims of alcohol, gives the 8x potency.

1 minim of the 8x potency to 9 minims of dilute alcohol gives the 9x potency.

1 minim of the 9x potency to 9 minims of alcohol gives the 10x potency.

All following potencies are prepared with one minim of the preceding potency to nine minims of alcohol.

CLASS IX.

TRITURATION OF FRESH VEGETABLE AND ANIMAL
SUBSTANCES.

For this class, the lower triturations of which cannot be preserved, the rule is found in Hahnemann's "Chronic Diseases," under AGARICUS.

Fresh vegetables and animals are first pounded or grated to a fine pulp, then triturated and potentized according to the following proportions by weight and measure :

a. Centesimal Scale.

Two parts * by weight of the substance and 99 parts by weight of sugar of milk give the 1st trituration.

1 part by weight of the 1st trituration to 99 parts by weight of sugar of milk gives the 2nd trituration.

All following triturations are prepared with one part by weight of the preceding trituration to ninety-nine parts by weight of sugar of milk.

Conversion into Liquid Potencies.

One grain of the 3rd trituration dissolved in 50 minims of distilled water and mixed with 50 minims of alcohol gives the 4th potency.

1 minim of the 4th potency to 99 minims of alcohol gives the 5th potency.

All following potencies are prepared with one minim of the preceding potencies to ninety-nine minims of alcohol.

a. Decimal Scale.

Two parts by weight of the substance and 9 parts by weight of sugar of milk give the 1x trituration.

1 part by weight of the 1x trituration to 9 parts by weight of sugar of milk gives the 2x trituration.

All following triturations are prepared with one part by weight of the preceding trituration to nine parts by weight of sugar of milk.

Conversion into Liquid Potencies.

One grain of the 6x trituration dissolved in 50 minims of distilled water and mixed with 50 minims of alcohol gives the 8x potency.

1 minim of the 8x potency to 9 minims of dilute alcohol gives the 9x potency.

1 minim of the 9x potency to 9 minims of alcohol gives the 10x potency.

All following potencies are prepared with one minim of the preceding potency to nine minims of alcohol.

* Two parts are taken because of loss by evaporation during trituration.

A DICTIONARY
OF THE
HOMŒOPATHIC PHARMACOPŒIA
WITH ADDITIONS.

EXPLANATION OF ABBREVIATIONS USED.

- B.H.P. . . . *British Homœopathic Pharmacopœia.*
Am.H.P. . . . *American Homœopathic Pharmacopœia.*
B.P. . . . *British Pharmacopœia.*
N.O. . . . *Natural Order.*
Ad. . . . *Addition.* Applied to a remedy not mentioned in the B.H.P.

The most important medicines are in large type.

- Abelmoschus.** (Ad.) N.O. Malvaceæ. *Syn.* Hibiscus Abelmoschus. Musk Seed. An evergreen shrub, growing in Egypt, and in the East and West Indies. Parts employed, the seeds, which are about the same size as flax seed, kidney-shaped, striated, of a greyish-brown colour, with odour like that of musk, and warm taste. *Preparation.*—Tincture, using rectified spirit. Am.H.P.—Dried seeds are finely powdered and prepared as Class IV.
- Abies Canadensis.** (Ad.) N.O. Coniferæ. *Syn.* Pinus Canadensis. Hemlock Spruce, Canada Pitch. Habitat, America. Parts employed, the fresh bark and young buds. *Preparation.*—Tincture, which must be imported. Am.H.P.—The fresh bark and young buds are reduced to a pulp, and prepared as Class III.

Abies Nigra. N.O. Coniferæ. *Syn.* Pinus nigra. Black or Double Spruce. Habitat, America, New England to Wisconsin, and northward. Part employed, the gum. *Preparation.*—Tincture, proof spirit. Am.H.P.—Mother tincture, with 95 per cent. alcohol, as Class VI. a.

Abrotanum. *See* ARTEMISIA ABROTANUM.

Absinthium. *See* ARTEMISIA ABSINTHIUM.

Absolute Alcohol. *See* ALCOHOL ETHYLICUM.

Acalypha Indica. N.O. Euphorbiaceæ. Cupameni, Koopamanie, Indian Acalypha. Habitat, East India. Parts employed, the leaves. *Preparation.*—Tincture, 20 o.p. spirit; tincture-trituration, &c. Am.H.P.—The fresh plant is pounded and prepared as Class III.

Acidum Aceticum. (Glacial Acetic Acid.) Concentrated acetic acid, containing nearly 99 per cent. of real acid, $\text{HC}_2\text{H}_3\text{O}_2$. *Characters and tests.*—Same as B.P. *Preparations for dispensing.*—1 fluid drachm, diluted to 10 fluid drachms with distilled water, will make 1*x*. Distilled water is used for 1, distilled water to which 5 per cent. of rectified spirit has been added for 3*x* to 3, dilute alcohol for 4, and rectified spirit for 5 and upwards. *Pilules or globules*, 5 and upwards. Am.H.P.—See Class V. a.

Acidum Arseniosum. *See* ARSENICUM ALBUM.

Acidum Benzoicum. (Benzoic Acid, $\text{HC}_7\text{H}_5\text{O}_2$). Flowers of Benzoin. Obtained from benzoin, a balsamic resin, which exudes from the incised bark of the styrax benzoin, N.O. Styracaceæ. It is prepared by sublimation, but is not chemically pure. *Characters and tests.*—See B.P. Solubility, 1 in 450 of cold water; 1 in 12 of boiling water; 1 in 3 of rectified spirit, 60 o.p. B.P. dose, 10 to 15 grains. *Preparations for homœopathic use.*—Trituration, solution in rectified spirit. *Dispensing forms.*—1*x* to 3, trituration; or, 1*x* and upwards, tincture, tincture-trituration, pilules, or globules. Am.H.P.—1 part by weight of pure benzoic acid is dissolved in 9 parts by weight of alcohol, and dilutions prepared as Class VI. a. Triturations are prepared as Class VII.

Acidum Boracicum. *Syn.* Acidum Boricum. (Crystallized Boric Acid, H_3BO_3 .) A weak acid obtained by the

action of sulphuric acid on borax, and by the purification of native boric acid. *For characters and tests*, see B.P. Solubility, 1 in 25 of cold water; 1 in 3 of boiling water; 1 in 4 of glycerine; 1 in 30 of alcohol. B.P. dose, 5 to 30 grains. *Preparations for homœopathic use*.—Solution in rectified spirit, trituration, &c. Am.H.P.—Trituration as Class VII.

Acidum Carbolicum. (Carbolic Acid, $\text{HC}_6\text{H}_5\text{O}$.) *Syn.* Phenol, Phenic Acid, Phenic Alcohol. An acid obtained from coal-tar oil by fractional distillation and subsequent purification. *Characters and tests*.—See B.P. When 1, 2, or 3 parts of melted carbolic acid are mixed with 1 of water, the acid separates on cooling in oily-like globules; but when 4, 5, 6, 7, 8, and even 9 of acid to 1 of water are mixed, the solution is perfect at ordinary temperatures; when, however, the temperature sinks to 40° or under, the 8 and the 9 will crystallize out again (*Squire*). Solubility, 1 in 13 of water, 1 in 2 of olive oil, 4 in 1 of glycerine, 3 in 1 of chloroform, 4 in 1 of ether, 6 in 1 of alcohol; and in volatile oils. *Preparation for homœopathic use*.—Solution in rectified spirit for 1*x* and upwards; but it is most frequently used externally as a lotion, made by solution in water in proportions varying from 1 in 30 to 1 in 400 (B.H.P.) B.P. dose, 1 to 3 grains. *Dispensing forms*.—1*x* and upwards, tincture, pilules or globules. Am.H.P.—1 part by weight of pure crystallized carbolic acid is dissolved in 9 parts by weight of alcohol. Dilutions as Class VI. *a*.

Acidum Chromicum. (Ad.) (Chromic Acid, CrO_3 .) *Syn.* Anhydrous Chromic Acid; Chromic Anhydride. An anhydride (not a true acid). Is obtained by adding strong sulphuric acid to bichromate of potassium. Very deliquescent; corrosively caustic to the skin. If placed in contact with alcohol, glycerine, and some other organic matters, sudden combustion or explosion may ensue. For further characters and tests, see B.P. Solubility, 2 in 1 of water. *Preparation*.—Solution in distilled water 1*x* to 4*x*, 5*x* with water to which 5 per cent. of spirit has been added, No. 3 with dilute alcohol, and all above with rectified spirit.

Pilules and globules No. 3 and upwards. Am.H.P.—Class V. *a*.

Acidum Citricum. (Ad.) (Citric Acid, $\text{H}_2\text{C}_6\text{H}_5\text{O}_7 \cdot \text{H}_2\text{O}$)

For mode of preparation, characters and tests, see B.P. Solubility, 10 in 6 of water, 1 in 2 of glycerine, 10 in 15 of rectified spirit. B.P. dose, 10 to 30 grains. *Homœopathic preparation*.—Solution in distilled water, 1*x* and 2*x*, 3*x* and 4*x* dilute alcohol. All above that with rectified spirit. Pilules and globules 3 and upwards. Am.H.P.—Trituration as Class VII.

Acidum Fluoricum. (Hydrofluoric Acid, HF.)

Prepared by distilling pure fluorspar (calcic fluoride) in a state of fine powder, with sulphuric acid, in a retort of platinum or lead. The preparation of this acid is a troublesome process, and requires great caution. It is best obtained from the manufacturing chemist. *Preparation for homœopathic use*.—"As this solution contains about 36 per cent. by weight of the pure acid, 22 minims, or an equivalent number of small drops, cautiously dropped into a fluid drachm of distilled water, previously placed in a gutta-percha bottle, will make the 1*x* attenuation. Water must be used for making the first three attenuations, and all these must be kept in gutta-percha bottles. Dilute alcohol is used for 4, and rectified spirit for all above" (B.H.P.). Fluoric acid is not used in medicine, except by the homœopathic school. *Dispensing forms*.—1*x* to 3, watery solution only; 4, dilute tincture; 5 and upwards, tincture, pilules, or globules. Am.H.P.—1 part by weight of pure fluoric acid is dissolved in 99 parts by weight of distilled water, and must be preserved in gutta-percha vials. Dilutions must be prepared as directed under Class V. *b*; except that distilled water must be used for all dilutions to the 3 or 6*x*, gutta-percha vials being employed for diluting as well as for preserving.

Acidum Formicum. (Glacial Formic Acid, HCHO_2 .)

An acid first discovered in the red ant (Formica rufa), but easily prepared artificially by various processes. May be obtained pure from the operative chemist. N.B.—It is extremely corrosive, and causes vesications or painful ulcers when dropped on the skin. *Preparation*.—Solution in dis-

tilled water for 1*ss*, using dilute alcohol for 1, and rectified spirit for 3*ss* and upwards. Am.H.P.—See Class V. *a*.

Acidum Gallicum. ($\text{H}_3\text{C}_6\text{H}_3\text{O}_6\cdot\text{H}_2\text{O}$.) Gallic Acid. An acid prepared from galls. For mode of preparation, characters and tests, *see* B.P. Solubility, 1 in 100 of cold water; 1 in 3 of boiling water; 1 in 8 of rectified spirit; 1 in 5 of glycerine, or with heat, 1 in 4. B.P. dose, 2 to 10 grains. *Homœopathic preparation.*—Solution in rectified spirit, 1*ss* and upwards; trituration. Am.H.P.—Trituration as Class VII.

Acidum Hydrobromicum. (Ad.) (Hydrobromic Acid, HBr.) The hydrobromic acid of pharmacy is a 10 per cent. solution of the gas in water, which would represent the 1*ss* attenuation; dilute with water to 3*ss*, then rectified spirit. B.P. dose of the 10 per cent. solution, 15 to 50 minims. Am.H.P.—Dilutions as Class V. *a*.

Acidum Hydrochloricum. *See* ACIDUM MURIATICUM.

Acidum Hydrocyanicum. (Hydrocyanic Acid, HCN.)

Syn. Prussic Acid, Cyanhydric Acid. Obtained by distilling yellow prussiate of potash with sulphuric acid and water. For mode of preparation and tests, *see* B.P. *Preparation for homœopathic use.*—1 measure of the dilute B.P. acid diluted to 2 measures with rectified spirit will make the first centesimal attenuation. Rectified spirit is used for 3*ss* and upwards. Hydrocyanic acid and its attenuations should be freshly made, as it deteriorates when kept. *Dispensing forms.*—Below 3*ss*, tincture only; 3*ss* and upwards, tincture, pilules, or globules. B.P. dose of the 2 per cent. solution, 2 to 8 minims. Am.H.P.—Equal parts by weight of 2 per cent. acid and distilled water form the first centesimal, and dilutions are prepared as Class VI. *b*.

Acidum Lacticum. (Lactic Acid, $\text{HC}_3\text{H}_5\text{O}_3$.) A colourless syrupy liquid, inodorous, with a pure acid taste, sp. gr. 1.21. May be obtained pure from the operative chemist. *Preparation.*—100 grains made up to 750 grains by weight of distilled water will form the 1*ss* attenuation, using dilute alcohol for 1, and rectified spirit for all above. Am.H.P.—Solution in alcohol as Class VI. *b*.

ACIDUM MURIATICUM. (Hydrochloric Acid, HCl.)

Syn. Acidum Hydrochloricum. The process for preparing is fully described in the B.P., where also full characters and tests are given. *Preparation for Homœopathic use.*—As this solution contains about 32 per cent. by weight of the pure acid, 100 grains should be made up to 320 grains by weight with distilled water to form the 1x attenuation. Distilled water only should be used for 1, distilled water to which 5 per cent. of rectified spirit has been added up to 3, then dilute alcohol for 4, and after that rectified spirit. *Dispensing forms.*—1x to 3, watery solution only; 4, dilute tincture; 5 and upwards, tincture, pilules, or globules. Used with an equal quantity of water to diphtheric patches in the throat. In allopathic practice the B.P. dilute acid is given in doses of 10 to 30 minims. Am.H.P.—1 part by weight of pure muriatic acid (sp. gr. 1.16) is dissolved in 2 parts by weight of distilled water, forming 1x, and dilutions as Class V. a.

ACIDUM NITRICUM. (Nitric Acid, HNO_3 .) Prepared from nitrate of potassium or nitrate of sodium by distillation with sulphuric acid and water, and containing 70 per cent. by weight of the pure acid. It must answer the characters and tests of the B.P. *Preparation.*—1 fluid drachm diluted with distilled water until it measures 9 fluid drachms will make the 1x attenuation; distilled water must be used for 1, distilled water to which 5 per cent. of rectified spirit has been added up to 3, and dilute alcohol for 4, after which rectified spirit may be employed. *Dispensing forms.*—1x to 3, watery solution only; 4, dilute tincture; 5 and upwards, tincture, pilules, or globules. B.P. dose of the dilute acid, 10 to 30 minims. Am.H.P.—1 part by weight of pure nitric acid (sp. gr. 1.42) is dissolved in 9 parts by weight of distilled water, making 1x, and dilutions as class V. a.

Acidum Oxalicum. (Oxalic Acid, $\text{H}_2\text{C}_2\text{O}_4 \cdot 2\text{H}_2\text{O}$.) *Syn.* Hydrogen Oxalate. This is the purified oxalic acid of the B.P., and should answer the following characters and tests of the B.H.P.: colourless prismatic crystals, strongly acid, dissolving freely in water and in rectified spirit. Heated in a test tube with strong sulphuric acid, it dissolves with effervescence, evolving carbonic oxide and carbonic anhy-

dride, the former of which burns with a blue flame when ignited at the mouth of the tube. Heated in a dry tube, it melts readily, and at a temperature below 350° is entirely converted into vapour, a part of which condenses on the sides of the tube in fine transparent needles. Its solution in water gives a white precipitate with nitrate of silver, soluble in dilute nitric acid. A strong solution gives, with chloride of barium, on stirring with a glass rod, a granular precipitate, soluble in dilute nitric acid. Solubility, 12.5 per cent. in cold water, 25 per cent. in alcohol, 100 per cent. in boiling water. *Preparation for homœopathic use.*—Solution in rectified spirit, 1 in 10. *Dispensing forms.*—1*x* and upwards, tincture, pilules, or globules. Not used by the old school internally. Am.H.P.—Solution in distilled water 1 in 100 by weight, and dilutions as Class V. b.

ACIDUM PHOSPHORICUM. (Phosphoric Acid, H_3PO_4 .)

Hahnemann directs this to be prepared by the action of sulphuric acid on calcined bones. It can be better prepared by the action of nitric acid upon phosphorus as directed in the B.P. For characters and tests, see B.P. *Preparation.*—The diluted acid of the B.P. (sp. gr. 1.08) forms our 1*x* preparation. The 1 attenuation should be made with distilled water, 3*x* and 2 with distilled water to which 5 per cent. of rectified spirit has been added, 5*x* with dilute alcohol, and 3 and upwards with rectified spirit. *Dispensing forms.*—1*x* to 2, watery solution only; 5*x*, dilute tincture; 3 and upwards, tincture, pilules, or globules. B.P. dose, of dilute acid 10 to 30 minims. Am.H.P.—1 part by weight of purified glacial phosphoric acid is dissolved in 9 parts by weight of distilled water to form 1*x*; dilutions as Class V. a., except that dilute alcohol is used for the 2*x*, and strong alcohol for the 3*x* dilutions.

Acidum Picricum. Picric Acid ($C_6H_3(NO_2)_3O$). Carbazotic Acid, Tri-nitro-carbolic Acid. Prepared by the action of nitric acid on carbolic acid, indigo, salicine, silk, and other substances. It may also be obtained from coal-tar, creasote, or from Australian gum. It should be recrystallized. It is sparingly soluble in water, but is readily soluble in alcohol and in ether. Most of the picrates are

explosive by percussion. *Preparations.*—Trituration; solution in rectified spirit, 1 in 20. *Dispensing forms.*—1x to 3, trituration; or, 1 in 20 and upwards, tincture, tincture-trituration, pilules or globules. Am.H.P.—Solution in distilled water, 1 in 100 by weight to form No. 1; dilutions as Class V. b.; trituration as Class VII.

Acidum Salicylicum. ($\text{HC}_7\text{H}_5\text{O}_2$.) Salicylic Acid. A crystalline acid obtained by the combination of the elements of carboic acid with those of carbonic acid gas and subsequent purification; or from natural salicylates, such as the oils of wintergreen and sweet birch. The natural acid is preferable for internal use. Solubility, 1 in 700 of cold water, 1 in 15 proof spirit, 1 in 4 rectified spirit, 1 in 120 olive oil, 1 in 195 glycerine, 1 in 8 of lard at 180° F. *Preparations for homœopathic use.*—Solution in rectified spirit, and trituration. B.P. dose 5 to 30 grains. Am.H.P.—Trituration as Class VII.

Acidum Succinicum. (Ad.) Succinic Acid ($\text{H}_2\text{C}_4\text{H}_4\text{O}_4$.) Prepared by the distillation of coarsely-powdered amber (succinum) in a retort. It is also prepared artificially. May be obtained from the operative chemist. Solubility, 1 in 30 of cold water. *Preparations.*—Solution in distilled water, trituration. Am.H.P.—Trituration as Class VII.

ACIDUM SULPHURICUM. Sulphuric Acid. Hahnemann recommends the Nordhäusen, or fuming sulphuric acid, to be used, directing it to be redistilled in glass vessels. We use, however, the B.P. acid produced by the combustion of sulphur and the oxidation and hydration of the resulting sulphurous acid gas by means of nitrous and aqueous vapours. It contains about 98 per cent. by weight of real sulphuric acid, H_2SO_4 , and should answer the B.P. characters and tests. For 1x take one part of B.P. acid and make up to 10 with distilled water, using water for 2x, 3x to 3 with water to which 5 per cent. of rectified spirit has been added, 4 with dilute alcohol, and 5 and upwards with rectified spirit. *Dispensing Forms.*—1x to 3, watery solution only; 4, dilute tincture; 5 and upwards, tincture, pilules, or globules. B.P. dose of the *dilute* acid, 5 to 30 minims. Am.H.P.—1 part by weight of pure

sulphuric acid (sp. gr. 1·843) is dissolved in 9 parts by weight of distilled water; dilutions as Class V. *a*.

Acidum Sulphurosum. (Sulphurous Anhydride, SO_2 .) Sulphurous acid gas, dissolved in water, and constituting 9·2 per cent. by weight of the solution. *See* B.P. for preparation, characters and tests. B.P. dose, $\frac{1}{2}$ to 1 fluid drachm. *Preparation.*—The above may be considered the 1*x* attenuation; dilute alcohol may be used for 1, and rectified spirit for all above. Not in the Am.H.P.

Acidum Tannicum. (Gallo-tannin, $\text{C}_{27}\text{H}_{22}\text{O}_{17}$.) Tannic Acid, or Tannin. An acid prepared from galls. *See* B.P. for preparation, characters and tests. Solubility, 10 in 8 of water, 10 in 8 of rectified spirit, 1 in 3 of glycerine, or, if warmed, 1 in 2. B.P. dose, 2 to 10 grains. *Preparation.*—Solution in rectified spirit, 1*x* and upwards; trituration Am.H.P.—Trituration as Class VII.

Acidum Tartaricum. (Ad.) (Tartaric Acid, $\text{H}_2\text{C}_4\text{H}_4\text{O}_6$.) This is the purified tartaric acid of the B.P. Solubility, 10 in 8 of water, 1 in 5 of rectified spirit. B.P. dose, 10 to 30 grains. *Preparations for homœopathic use.*—Solution in distilled water, &c. Am.H.P.—Trituration as Class VII.

Aconitia. (Ad.) *Syn.* Aconitine. An alkaloid obtained from aconite. For method of preparation, characters and tests, *see* B.P. Solubility, sparingly in cold water, 1 in 40 of rectified spirit. It is a very active poison, and not usually given internally, except by homœopaths in the form of an attenuation. In one case (an elderly lady), one-fiftieth of a grain had nearly proved fatal. Usually prescribed for neuralgia externally. *Preparation.*—Trituration, 3*x* being the lowest that should be dispensed. Am.H.P.—Trituration, as Class VII.

ACONITUM NAPELLUS, *Linn.* N.O. Ranunculacæ. Common Monkshood, Wolfsbane. *Habitat.*—France, Sweden, Switzerland, Austria, and other parts of Europe. It is not truly indigenous, but sometimes found growing wild in watery places, by the side of streams. *Botanical Characters.*—Perennial herb. Root tapering, and in the summer months having one or two lateral roots attached to it. Stem simple. Leaves with five or three deeply cut wedge-shaped segments, which are further incised in a

pinnatifid manner; smooth and shining, dark green above, paler beneath, exciting slowly, when chewed, a sensation of tingling and numbness. *Flowers* blue, or deep violet, racemose, or somewhat paniced below. *Calyx* of 5 petaloid sepals, irregular, upper one helmet-shaped; *helmet* semicircular, or rarely boat-shaped. *Petals* 5, 3 small and often abortive, 2 superior on long stalks, each expanded at the apex into a sac hidden beneath the helmet-shaped sepal; *sac* somewhat conical. *Stamens* with hairy filaments. *Carpels* 3, or rarely 5; when young, diverging. *Seeds* numerous, angular, wrinkled. *Preparations and Dispensing Forms*.—Mother tincture, 1 in 10 with proof spirit, from the fresh leaves and flowering tops, gathered when about one-third of the flowers are expanded, from plants cultivated in Britain. It flowers between June and August. Mother tincture 1 in 10 with proof spirit from the fresh root, collected in the winter or early spring before the leaves have appeared, proceeding as directed for fresh plant tinctures. The moisture in the leaves and tops is about 70 per cent. Root 69 per cent. Tincture from the dry root, 1 in 10 with proof spirit. For *characters* of the dry root see B.P. When Aconite ϕ tincture is prescribed, that made from the fresh leaves and tops should be dispensed unless otherwise ordered. Attenuations should also be made from that preparation. Tincture-triturations, pilules and globules are prepared with the ϕ tincture and its attenuations. The 1 \times attenuation should be prepared with proof spirit. Am.H.P.—In the flowering time, June and July, the entire plant, except the root, is chopped and pounded to a pulp, and pressed out *lege artis* in a piece of new linen. The expressed juice is then, by brisk agitation, mingled with an equal part by weight of alcohol, and the mixture is poured into a well-stoppered bottle, and allowed to stand eight days in a dark, cool place, and then filtered. It is also recommended to prepare a tincture according to Class II. Drug power of tincture, $\frac{1}{2}$; dilutions as Classes I. and II.

Aconitum Cammarum. (Ad.) *Syn.* Aconitum Variegatum, *Linn.* N.O. Ranunculaceæ. Habitat, same as Aconitum napellus. Part employed, the fresh root. *Pre-*

paration.—Tincture. Am.H.P.—The fresh root is used and prepared as Class III.

Aconitum Ferox. (Ad.) N.O. Ranunculaceæ. The most poisonous species of aconite known; found growing on the Himalaya mountains (Am.H.P.). Am.H.P.—The root is finely powdered and prepared as Class IV.

Aconitum Lycoctonum. Linn. (Ad.) N.O. Ranunculaceæ. Grows in the same localities as *Aconitum napellus*. Am.H.P.—The fresh herb, gathered when coming into bloom, is chopped, &c., as Class I.

ACTÆA RACEMOSA. Linn. (*Cimicifuga racemosa* Elliott.) N.O. Ranunculaceæ. Syn. *C. serpentaria*, *Actæa monogynia*, *Macrotys racemosa*, *M. octreoides*, *Botrophis serpentaria*. Black Snake Root. Habitat, Canada, Georgia, and Western States. Part employed, the rhizome. *Characters of the dried rhizome and rootlets, see B.P.* *Preparations.*—1. Tincture of the fresh rhizome, prepared in, and imported from, North America; 2. Tincture of the dry rhizome and rootlets as imported, using proof spirit. Process I. *Dispensing Forms.*— ϕ and upwards, tincture, tincture-trituration, pilules, or globules. Am.H.P.—Tincture from fresh root as Class III.

Actæa Spicata. Linn. N.O. Ranunculacæ. Herb Christopher, or Baneberry. Found all over Germany. Parts employed—(1) the fresh root; (2) the ripe fruit. *Preparation.*—Tincture, with proof spirit; tincture-trituration, pilules and globules. Am.H.P.—Tincture from fresh root as Class III.

Adeps Præparatus. (Prepared lard of the B.P.) Syn. Axungia.

Æsculus Glabra. N.O. Sapindaceæ. Foetid, or Ohio Buckeye. Habitat, North America. Parts employed, the whole ripe fruit. *Preparations and dispensing forms.*—Tincture, proof spirit; tincture-trituration, pilules and globules. Am.H.P.—The fresh hulled nut is chopped, &c., and prepared as Class III.; triturations as Class VII.

ÆSCULUS HIPPOCASTANUM. Linn. N.O. Sapindaceæ. Syn. *Hippocastanum vulgare*. Horse Chestnut. Habitat unknown, probably native of both Northern India

and North America. Thrives well in Britain and France. Part employed, the ripe kernel. *Characters*.—Nuts ovoid, mahogany coloured, perfectly smooth and shining, with a large oval hilum, which is paler coloured and rough; kernel white, and very astringent to the taste (very similar in general appearance to Spanish chestnuts, but generally brighter coloured). Time for collecting, September and October. *Preparations*.—Tincture of the fresh kernel, corresponding in alcoholic strength with proof spirit. Process I. Trituration of the dry kernel. *Dispensing forms*.— ϕ and upwards, tincture, tincture-trituration, pilules, or globules; or 1x to 3, trituration. Average loss of moisture, 45 per cent. Am.H.P.—The ripe, fresh-hulled nut is chopped and pounded to a pulp and weighed; then proceed as Class III.

ÆTHER. (Ether.) *Syn.* Sulphuric Ether. A volatile liquid prepared from alcohol, and containing not less than 92 per cent. by volume of pure ether (C_2H_5)₂O. It can be obtained from a manufacturing chemist, and should answer the following B.P. characters and tests:—A colourless, very volatile and inflammable liquid, emitting a strong and characteristic odour, and boiling below 105° F. Specific gravity 0.735. Fifty measures agitated with an equal volume of water are reduced to 45, by an absorption of 10 per cent. It evaporates without residue.

Æthusa. (*Æthusa Cynapium*, *Linn.*). N.O. Umbelliferae. Fool's Parsley, Garden Hemlock. A common weed in gardens and cultivated fields. *Characters*.—Calyx, superior, minute. Petals five, inverse heart-shaped, with sharp, inflexed points. Flowers white. Fruit round, egg-shaped. Carpels, with five, elevated, thick, sharply-keeled ridges. Seeds half globose. General involucre none, partial involucre of three unilateral pendulous leaves. *Special characters*.—Leaves uniform. Leaflets wedge-shaped, decurrent, running down the leaf-stalk. Segments pear-shaped. (*Flora Homœopathica*.) *Preparation*.—Tincture of the whole fresh plant when in flower (July, August, or September), with proof spirit as Process I. *Dispensing forms*.— ϕ and upwards, tincture, tincture-trituration, pilules, or globules. Average loss of moisture, 63 per cent.

Am.H.P.—The whole fresh plant, when in flower, is prepared as Class III.

AGARICUS. (*Agaricus Muscarius*, *Linn.*). N.O. Fungi. *Syn.* *Amanita muscaria*, *Agaricus imperialis*. Fly Agaric. Habitat, Europe, Asia, and America. Not very common in England, but abundant in some parts of Scotland. Found in dry places, in dry pine-woods in Scotland, and other parts of the north of Europe. *Characters*.—Margin of pileus striate. Gills white; stem subsolid, bulbous; vulva scaly. Pileus three to seven inches broad, convex at length, sometimes depressed; of a rich orange scarlet, but occasionally whitish, yellowish or brown. Sporules white, rounded. Stem four to nine inches high, half to one inch thick. Ring deflexed. (*Flora Homœopathica*). *Preparation*.—Tincture of the fresh fungus with dilute alcohol as Process II. Collect in autumn, and before making the tincture carefully clean and remove the outer skin. Average loss of moisture, 93 per cent. *Dispensing forms*.— ϕ and upwards, tincture, tincture-trituration, pilules, or globules. Trituration of the dried fungus. Am.H.P.—Select the younger specimens, which have convex cap, not yet hollow stem; clean, &c., and prepare as Class III.

Agave Americana. *Linn.* (Ad.) N.O. Amaryllidaceæ. American Aloe, Maguey, Century Plant. Indigenous to the tropical portion of America. Am.H.P.—The fresh leaves are chopped, &c., and prepared as Class III.

AGNUS CASTUS. (*Vitex Agnus Castus*, *Linn.*) N.O. Verbenacæ. *Syn.* *V. verticillata*. The Chaste Tree. Habitat, the shores of the Mediterranean, Provence, and Greece; on sandy spots and at the foot of rocks. Flowering time, July to September. *Characters*.—Berries somewhat like peppercorns, dark purple, half covered by their sage-green calyces, yellowish within, hard, having an aromatic odour, and a warm, aromatic, peculiar taste. *Preparation*.—Tincture of the ripe berries, fresh or recently dried, corresponding in alcoholic strength with 20 o.p. spirit. Process I. *Dispensing forms*.— ϕ and upwards, tincture, tincture-trituration, pilules, or globules. Am.H.P.—The fresh ripe berries are pounded to a pulp, &c., and prepared as Class III.

Agrostemma Githago. (Ad.) *Syn.* *Lychnis Githago*. N.O. Caryophyllaceæ. Corn Cockle. A common weed, indigenous to Europe. Am.H.P.—The ripe, dried seeds, are finely powdered and weighed. Proceed as Class IV.

AILANTUS. (*Ailantus Glandulosa, Desf.*) N.O. Simarubaceæ. The Tree of Heaven. Habitat, Eastern Asia. Cultivated as a shade tree in North America. Parts employed, the fresh, well-developed flowers, and the fresh bark of the young shoots and roots. Time for collecting, the flowers when well developed; the bark in the spring. *Preparations.*—1. Tincture of the fresh flowers; 2. Tincture of the fresh bark of the young shoots and roots in equal parts; in either case prepared in, and imported from, North America. *Dispensing forms.*— ϕ and upwards, tincture, tincture-trituration, pilules, or globules. Am.H.P.—Equal parts of the fresh shoots, leaves, blossoms, and the young bark are chopped, and pounded to a pulp, and weighed. Proceed as Class III.

Alchemilla Arvensis. (Ad.) N.O. Rosaceæ. *Syn.* *A. vulgaris*. Ladies' Mantle, Parsley Piert, Breakstone. Habitat, Europe, on the banks of rivulets and borders of woods. Said to be useful in discharging small calculi from the kidney and bladder; hence it was called breakstone. *Preparation.*—Tincture.

ALCOHOL ETHYLICUM. (Ethylic Alcohol.) *Syn.* Absolute Alcohol, C_2H_5HO . This can be obtained from the wholesale druggists, and should answer the following B.P. characters and tests.—“Colourless and free from empyreumatic odour. Specific gravity from 0.797 to 0.800, and therefore containing 1, or at most 2, per cent. of water. It is entirely volatilised by heat, is not rendered turbid when mixed with water, and does not cause anhydrous sulphate of copper to assume a decided blue colour even after the two have been well shaken together.” See also SPIRITUS RECTIFICATUS.

Alcohol Sulphuris. (Carbonic Sulphide, CS_2 .) *Syn.* Carburetum sulphuris. Bisulphuret of Carbon. A volatile liquid easily made from its elements, having a most disagreeable odour. May be obtained from the manufactur-

ing chemist. *Preparation*.—Solution in rectified spirit, 1 in 10; tincture, pilules and globules.

Aletrin. (Ad.) (Resinoid of Aletris Farinosa.) *Preparation*.—Trituration.

Aletris Farinosa. (Ad.) N.O. Hæmodoraceæ. Star Grass, Blazing Grass, Colic Root, Unicorn Root. Habitat, found in almost all parts of the United States, in fields, and about the borders of woods. Flowering time, June and July. Am.H.P.—The fresh bulb is used and prepared as Class III.

Alisma Plantago. Linn. (Ad.) N.O. Alismaceæ. *Syn.* Alisma Parviflora. Water Plantain. Common in Europe and the United States, growing in streams, pools, &c. Am.H.P.—The fresh root is chopped and pounded to a pulp, and proceed as Class III.

ALLIUM CEPA. Linn. N.O. Liliaceæ. *Syn.* Cepa. The Common Onion. Part employed, the mature bulb. *Characters*.—Dr. Hering, who proved this, recommends "the red, long-shaped, and strongest-flavoured to be selected, and, if possible, not raised from ground which has been cultivated for centuries." Collected in autumn. *Preparation*.—Tincture, 1 in 20, corresponding in alcoholic strength with proof spirit. Process II. *Dispensing forms*.— ϕ and upwards, tincture, tincture-trituration, pilules, or globules. Average loss of moisture, 84 per cent. Am.H.P.—As Class III.

ALLIUM SATIVUM. Linn. N.O. Liliaceæ. Garlic. This well-known culinary plant is cultivated everywhere. Collect in early autumn. *Preparation*.—Tincture of the mature bulb, 1 in 20, corresponding in alcoholic strength with proof spirit. Process II. *Dispensing forms*.— ϕ and upwards, tincture, tincture-trituration, pilules, or globules. Average loss of moisture, 63 per cent. Am.H.P.—The fresh bulbs, gathered in June to August, and freed from their membranes, are chopped, pounded to a pulp, &c., and prepared as Class III.

Alnus Rubra. (Ad.) *Syn.* Alnus serrulata. N.O. Betulaceæ. Red Alder, Tag Alder. Indigenous to the U.S. of America. Am.H.P.—The fresh bark is chopped, &c. Class III.

ALOE. (Aloe Socotrina.) N.O. Liliaceæ. This is the Socotrine Aloes of the B.P., and known in commerce as Socotrine and Zanzibar Aloes. It is almost entirely soluble in proof spirit. For characters and tests see B.P. *Preparation.*—Mother tincture by dissolving Aloes in the proportion of 1 in 10 in proof spirit. Trituration. *Dispensing Forms.*— ϕ and upwards, tincture, tincture-trituration, pilules, or globules. B.P. dose, 2 to 6 grains. Am.H.P.—Solution as Class IV.; triturations as Class VII.

Alstonia Constricta. (Ad.) N.O. Apocynaceæ. Bitter Bark, native Quinine Bark. Indigenous to the colonies of New South Wales and Queensland. Chief uses, in fever and ague. Part employed, the bark. *Preparation.*—Tincture, with rectified spirit. Not in the Am.H.P.

Alstonia Scholaris. N.O. Apocynaceæ. Satween. Habitat, the East Indies. The bark possesses bitter, tonic, and astringent properties, and is much esteemed in chronic diarrhoea and dysentery. *Preparation.*— ϕ tincture of the bark, using rectified spirit; pilules and globules; tincture trituration. Am.H.P.—The bark finely powdered, &c., as Class IV.

Alstonin. (Ad.) The alkaloid obtained from the bark of *Alstonia constricta*. Dissolves easily in alcohol, sparingly in water. *Preparations.*—Tincture, using rectified spirit; trituration.

Althæa. (Ad.) (*Althæa officinalis*, Linn.) N.O. Malvaceæ. Marshmallow. Am.H.P.—The fresh root collected in autumn from two-year old plants, is chopped, pounded, &c., and prepared as Class III.

ALUMEN. Alum. ($\text{Al}_2\text{SO}_4, \text{K}_2\text{SO}_4, 24\text{H}_2\text{O}$.) Potash Alum only should be used. It must be purified by re-crystallization. *Characters and tests.*—See B.P. Solubility, 1 in 10 or 12 of water. B.P. dose, 10 to 20 grains. *Preparations.*—Trituration; solution in distilled water, 1 in 10. The 1 attenuation from this solution should be made with distilled water, 3*x* to 3 with distilled water to which 5 per cent. of rectified spirit has been added, 7*x* with dilute alcohol, 4 with spirit of 20 O.P., and 5 and upwards with rectified spirit. *Dispensing Forms.*—1*x* to 3, trituration,

or 1 in 10 to 3, watery solution ; 4 and upwards, tincture, tincture-trituration, pilules, or globules. Am.H.P.—Triturations as Class VII.

ALUMINA. Alumina. ($\text{Al}_2\text{O}_3, 3\text{H}_2\text{O}$.) Oxide of Aluminium. Take of ammonia alum in crystals, 1 ounce ; strong solution of ammonia, $\frac{1}{2}$ fluid ounce ; distilled water, a sufficiency. Powder the alum, and dissolve it in 10 fluid ounces of warm distilled water ; add the ammonia, collect the precipitate on a calico filter, and wash it with hot distilled water until the washings cease to give a precipitate with chloride of barium, or any odour of ammonia when mixed with caustic potash and boiled. The alumina is then carefully dried on a water bath and pulverized. (B.H.P.) *Characters.*—A very fine white powder, soft to the touch, tasteless, infusible, forming a paste with water, but not dissolving in it. *Preparation.*—Trituration. *Dispensing Forms.*—1x to 3, trituration only ; 4 and upwards, tincture, tincture-trituration, pilules, or globules. Am.H.P.—Trituration as Class VII.

Aluminium. Metallic Aluminium. (Al.) The purified metal in the form of the thinnest leaf. Is very thin, brilliant, silvery white, and not oxidized by the action of air. *Preparation.*—Trituration, &c. Am.H.P.—Trituration as Class VII.

AMBRA GRISEA. *Syn.* Ambra ambrosiaca, *Linn.*, Ambra vera, Ambra maritima. Ambergris. "This is now generally believed to be a morbid secretion from the liver of the spermaceti whale (*Physeter macrocephalus*, *Linn.*) Is usually found floating on the sea along the coast of Coromandel, Japan, the Moluccas, and Madagascar. The most esteemed is that from Madagascar and Sumatra. *Characters.*—Large opaque balls, rough to the touch, formed of concentric layers, friable, lighter than water, spongy, of a greyish-brown colour externally, traversed within by black and yellowish-red streaks, and full of whitish specks. These often occur in the interior, the beak, and other hard parts of different species of cuttlefish, especially *Sepia octop.*, and *S. moschata*. It has a peculiar agreeable odour, somewhat aromatic, is almost tasteless, and when heated softens like wax, and burns readily with a bright

flame, leaving very little residue. Soluble in ether and in absolute alcohol by the aid of heat, and partially so in rectified spirit " B.H.P. Is sometimes given in doses from 5 grains to a drachm. *Preparations*.—Trituration; tincture, 1 in 20, using absolute alcohol. Process III. *Dispensing Forms*.—1x to 3, trituration; or ϕ and upwards, tincture, tincture-trituration, pilules, or globules. Am.H.P.—Trituration as Class VII.

Ammoniacum. (*Dorema Ammoniacum*.) N.O. Umbelliferae. Gum Ammoniac. Part employed, the gum resin which exudes from the stem. For characters, see B.P. Two ounces of rectified spirit will dissolve 40 grains out of 50. B.P. dose, 10 to 20 grains. *Preparation*.—Trituration; tincture made with rectified spirit. *Dispensing Forms*.—1x to 3, trituration, 4 and upwards, tincture, tincture-trituration, pilules, or globules. Pilules and globules can be medicated from the stronger tincture. Am.H.P.—Trituration as Class VII.

Ammonium Aceticum. (*Ammonic Acetate*, $\text{NH}_4\text{C}_2\text{H}_3\text{O}_2$.) *Syn.* Spiritus Mindereri. Solution of Acetate of Ammonium. Mindererus' Spirit. Prepared by saturating diluted acetic acid with carbonate of ammonia. *Preparation*.—Solution in distilled water for No. 1, which can be made from the B.P. liquor; 3x with dilute spirit; afterwards rectified. B.P. dose of the liquor, 2 to 6 fluid drachms. Am.H.P.—1 part by weight of pure "Spirit of Mindererus" is dissolved in 9 parts by weight of distilled water, and dilutions prepared as Class V. a.

Ammonium Benzoicum. (*Ammonii Benzoas*, $\text{NH}_4\text{C}_6\text{H}_5\text{O}_2$.) Benzoate of Ammonium. Prepared according to the B.P. solubility of the neutral salt; 1 in 5 of water; 1 in 18 of rectified spirit. B.P. dose, 10 to 20 grains. *Preparation*.—Solution in distilled water for 1x, using dilute alcohol for 1, and rectified spirit for all above. Am.H.P.—Trituration as Class VII.

Ammonium Bromatum. This is the ammonii bromidum, or bromide of ammonium of the B.P. (NH_4Br), and should answer the characters and tests of that work. B.P. dose, 2 to 20 grains. Solubility, 1 in $1\frac{1}{2}$ of water, 1 in 18 of rectified spirit. *Preparation*.—Solution in distilled water

up to 1, using dilute alcohol for 3x, and afterwards rectified spirit. Am.H.P.—Trituration as Class VII.

AMMONIUM CARBONICUM. (Ammonic Sesquicarbonate, $N_2H_{11}C_2O_5$.) The Ammonii carbonas of B.P. Carbonate of Ammonium. For characters and tests see B.P. Solubility, 1 in 4 of water, sparingly in spirit, 1 in 5 of glycerine. B.P. dose, 3 to 10 grains. *Homœopathic preparation.*—Soluble in distilled water for 1x, using dilute alcohol for 1, and rectified spirit for all above. *Dispensing forms.*—1x and 1, solution only; 3x and upwards, tincture, pilules, or globules. Am.H.P.—Solution as Class V. a.

AMMONIUM CAUSTICUM. This is the strong solution of Ammonia of the B.P. diluted to 10 per cent. (Liquor Ammonia Fortior, Ammoniacal Gas NH_3 , dissolved in water and constituting 32.5 per cent. of the solution, having a specific gravity of 0.891). *Homœopathic Preparation.*—Dilute the B.P. strong solution until it contains 10 per cent. of the gas. Water should be used for making 1, then dilute alcohol up to 2, and afterwards rectified spirit. *Dispensing Forms.*—1x to 2, solution only; 5x and upwards, tincture, pilules, or globules.

Ammonium Citricum (Citrate of Ammonium). Prepared by neutralizing citric acid with strong solution of ammonia, can be prepared from the strong solution of citrate of ammonium of the B.P. *Preparation.*—Solution in distilled water up to 1, using distilled water to which 5 per cent. of rectified spirit has been added for 3x, dilute alcohol for 2, and after that rectified spirit.

Ammonium Iodidum. (Ad.) (Ammonic Iodide, NH_4I .) Iodide of Ammonium. A whitish, deliquescent salt, granular or in crystals, which readily turns yellow. Solubility, 4 in 3 of water, 1 in 4 of rectified spirit. Given in doses of 2 to 5 grains three times a day. *Homœopathic preparation.*—Solution in distilled water up to 1, then water with 5 per cent. alcohol for 3x, then rectified spirit, &c. Am.H.P.—Trituration, Class VII. A solution would be the best for a deliquescent salt.

AMMONIUM MURIATICUM. (Ammonii Chloridum, NH_4Cl of the B.P.). Sal Ammoniac. The ordinary commercial salt dissolved in distilled water, and recrystallized.

For characters and tests *see* B.P. Solubility, 1 in 3 of water, 1 in 55 of rectified spirit, 1 in 5 of glycerine. B.P. dose, 5 to 20 grains. *Homœopathic preparations*.—Trituration; solution in distilled water for 1x, and rectified spirit for 1 and upwards. *Dispensing Forms*.—1x to 3, trituration, or 1x solution; 1 and upwards, tincture, tincture-trituration, pilules, or globules. Am.H.P.—*See* Class V. a; triturations as Class VII.

Ammonium Nitricum. (Ad.) (Ammonic Nitrate, NH_4NO_3 .) A white, deliquescent salt, in confused crystalline masses, having a bitter, acrid taste. Solubility, 4 in 3 of water, 1 in 11 of spirit. Am.H.P.—Solution as Class V. a.

Ammonium Phosphoricum. (Ammonii Phosphas, $(\text{NH}_4)_2\text{HPO}_4$ of the B.P.) *Syn.* Ammonia phosphas. For preparation, characters and tests, *see* B.P. Solubility, 1 in 2 of water, insoluble in rectified spirit. B.P. dose, 5 to 20 grains. *Homœopathic preparation*.—Solution in distilled water up to 1, using distilled water to which 5 per cent. of rectified spirit has been added for 3x and 2, dilute alcohol for 3, and afterwards rectified spirit. Am.H.P.—Trituration, Class VII.

Ammonium Succinicum. (Ammonic Succinate $(\text{NH}_4)_2\text{C}_4\text{H}_4\text{O}_4$.) Made by neutralizing succinic acid with solution of ammonia. *Preparation*.—Solution in distilled water up to 1, then use distilled water with 5 per cent. of rectified spirit for 3x and 2, dilute alcohol for 3, and afterwards rectified spirit.

Ammonium Valerianicum. (Ad.) (Ammonic Valerianate, $\text{AH}_4\text{C}_8\text{H}_8\text{O}_2$.) May be obtained from the operative chemist. Used principally in diseases of the nervous system. Ordinary dose, 2 to 8 grains. Soluble both in water and alcohol. *Homœopathic preparation*.—Solution in water, &c. Am.H.P.—Trituration, Class VII.

Ampelopsin. (Ad.) (Resinoid of Ampelopsis quinquefolia.) Am.H.P.—Trituration.

Ampelopsis Quinquefolia. (Ad.) N.O. Vitaceæ. Virginian Creeper. Am.H.P.—Part used, the fresh young shoots and the fresh bark. Class III.

Amphisbœna Vermicularis. (Ad.) *Syn.* Amphisbœna flavescens. Class, Reptilia; Order, Sauria; Family, Annu-H.P.

lata. The poison of a South American snake, common in the woods of Brazil. Am.H.P.—The poison, taken from the living animal, by cutting off part of its jaw, is triturated as Class IX.

Amygdalæ Amara. (Ad.) (Bitter Almond.) *Syn.* Amygdalus communis. N.O. Amygdalæ. Brought chiefly from Mogadore. Am.H.P.—The ripe kernel is the part used, and prepared as Class IV.; also triturations as Class VII.

Amyl Nitrosum. (Nitrite of Amyl, $C_5H_{11}NO_2$.) *Syn.* Amyl nitris. A liquid produced by the action of nitric or nitrous acid on amylic alcohol. For characters and tests see B.P. B.P. dose, by inhalation, the vapour of 2 to 5 minims; but in mixtures to be swallowed, from $\frac{1}{2}$ minim to 1 minim. To be used with caution. *Homœopathic preparation.*—Solution in rectified spirit. 1x and upwards, pilules and globules. Am.H.P.—See Class VI. a., using 95 per cent. alcohol.

Amylum. (Wheat Starch of the B.P.)

ANACARDIUM. (Semecarpus Anacardium, *Lin.*) N.O. Anacardiaceæ. *Syn.* Anacardium officinarum, A. orientale. Marking-nut Tree. Hahnemann's description is as follows: "Found in the forests of the East Indies: between the external black shining, heart-shaped, hard shell and the sweet kernel, which is covered with a brown, reddish, thin skin, there is a thick blackish juice, contained in a cellular tissue, with which the Indians mark their linen in an indelible manner. In the fruit which we receive here (Germany), this juice, which is commonly of the consistence of honey, is generally found dry." (Flora Homœopathica.) N.B. "It is very necessary to distinguish between the marking-nut tree, which is evidently the one Hahnemann described, and the cashew nut (Anacardium occidentale), which is often mistaken for it. It is quite possible that they may possess similar actions, but it is essential that homœopaths should use the precise species which has been employed in the proving." B.H.P. *Preparation.*—Trituration of the resinous juice. A tincture of the nut has been used, but as the black juice is only partially and very sparingly soluble in alcohol or water, it is of very indefinite strength, and cannot be recommended.

Dispensing Forms.—1x to 3, trituration only; 4 and upwards, tincture, tincture-trituration, pilules, or globules. Am.H.P.—Tincture as Class IV., using the pulverized seed and 95 per cent. alcohol; trituration from the soft resin as Class IX.

Anagallis Arvensis. N.O. Primulaceæ. Scarlet Pimpernel, Poor Man's Weather-glass. Habitat, waste, sandy fields of Europe; common in Britain. Flowers June to August. *Preparation.*— ϕ tincture of the entire fresh plant, proof spirit; ϕ and upwards, tincture, pilules and globules; tincture-trituration. Am.H.P.—Tincture, Class I.

Anatherum Muricatum. (Ad.) N.O. Gramineæ. Bena, Cuscuta. A well-known grass in the East Indies. Am.H.P.—Tincture from the root as Class IV.

Andira Inermis. (Ad.) N.O. Leguminosæ. Bastard Cabbage Tree. Native of Jamaica and other West Indian Islands. Am.H.P.—Tincture from the bark, Class IV.

Angelica Archangelica. (Ad.) N.O. Umbelliferae. Garden Angelica, American Covaige. Native of North of Europe; cultivated in gardens. Am.H.P.—Tincture from the dried root, Class IV.

Angustura. (Galipea Cusparia, *St. Hiltaire.*) N.O. Rutaceæ. Angustura Bark, Cusparia bark of the B.P. Habitat, tropical South America. For characters and tests see B.P. Distinguished from false angustura by its fracture not turning an arterial blood-red colour when touched with nitric acid. *Preparations.*—Tincture of the Bark, using dilute alcohol. Process I. Trituration. *Dispensing Forms.* ϕ and upwards, tincture, tincture-trituration, pilules, or globules; or 1x to 3, trituration. Am.H.P.—Tincture from the dried bark as Class IV.

Angustura Spuria. N.O. Loganiaceæ. Nux vomica (False Angustura) Bark. This is now generally acknowledged to be the bark of *Strychnos Nux Vomica*, Linn. *Characters and tests.*—In quills or flat pieces, short, often very much twisted like dried horn, arched backwards. The epidermoid crust variable, sometimes a spongy rust-coloured layer; at other times with whitish, prominent spots, more or less scattered or approximated. Nitric acid makes it intensely dark green or blackish. The inner

surface is not separable into laminæ, and is rendered of an arterial blood-red colour by nitric acid. *Preparation*.—Tincture of the bark, proof spirit. Am.H.P.—Tincture from the bark, Class IV.

Anilinum. (Aniline, Phenylamine, Kyanol, $C_6H_5NH_2$.)

Preparation.—Solution in rectified spirit. It should be kept in amber glass bottles.

Anilinum Sulphuricum. (Aniline Sulphate, $(C_6H_5N)_2H_2SO_4$.) *Syn.* Anilinæ sulphas. Kyanol Sulphate, Phenylamine Sulphate. Prepared by neutralizing sulphuric acid with pure aniline. *Preparation*.—Solution

in distilled water up to 1, using distilled water to which 5 per cent. of rectified spirit has been added for 3x and 2, dilute alcohol for 3, and afterwards rectified spirit. It should be preserved in amber glass bottles.

Anisum Stellatum. (Illicium Anisatum, *Linn.*). N.O.

Magnoliaceæ. Star-Anise-fruit. Habitat, China. *Characters*. See B.P. *Preparation*.—Tincture of the imported seed, using rectified spirit. Am.H.P.—Tincture from seed, Class IV.

Anthemis Nobilis. *Linn.* N.O. Compositæ. Common

Chamomile. Tincture is made of the entire cultivated plant, corresponding with 20 o.p. spirit; ϕ , 1x and upwards, tincture, tincture-trituration, pilules and globules. Am.H.P.—Tincture from the whole fresh plant, Class III.

ANTHOXANTHUM ODORATUM. N.O. Graminaceæ.

Sweet Vernal Grass. Habitat, Europe and America, Flowers May to July. *Preparation*.— ϕ , tincture of the flowering herb, 40 o.p. spirit; ϕ , 1x and upwards, tincture, pilules and globules; tincture-trituration. Average loss of moisture, 60 per cent. Am.H.P.—Tincture from the fresh herb when in flower. Class III.

Anthrakokali. Obtained by the action of fused caustic potash upon a peculiar kind of pit-coal obtained at Fünfkirchen, in Hungary, and hence no other kind of coal should be used. This is mentioned in Part II. of the

B.H.P., but we have never seen it prescribed. *Preparation*.—Trituration. *Dispensing forms*.—1x to 3, trituration only; 4 and upwards, tincture, tincture-trituration, pilules, or globules. Am.H.P.—The same.

ANTIMONIUM CRUDUM. (Antimonious Sulphide, Sb_2S_3 .) *Syn.* Stibium sulphuretum nigrum, Antimonium nigrum. Native Sesquisulphide of Antimony. This is the commonest ore of antimony, and is found native in various parts of the world, especially Hungary, in the Hartz, in France, in Cornwall, and in Borneo. *Characters and tests.*—"Masses consisting of closely aggregated needles, having a metallic lustre, leaden grey colour, inclining to steel-grey, which is unchanged in the streak. The needles are extremely brittle, and melt at a heat below redness, emitting a sulphurous smell. They dissolve slowly in boiling hydrochloric acid, evolving the odour of sulphuretted hydrogen. If the solution be filtered and mixed with water it gives a white precipitate, which is at once changed to orange by sulphuretted hydrogen." B.H.P. *Dispensing forms.*—1x to 3, trituration only; 4 and upwards, tincture, tincture-trituration, pilules, or globules. Am.H.P.—The *purified* sulphuret of antimony is prepared by trituration as Class VII.

Antimonium Iodatium. (Ad.) *Syn.* Antimonii iodidum. Iodide of Antimony, Teriodide of Antimony. Am.H.P.—Trituration.

Antimonium Muriaticum. (Antimonious Chloride, SbCl_3 .) *Syn.* Antimonii chloridum. Butter of Antimony. *Preparation.*—Trituration, &c.

Antimonium Oxydatum. (Antimonious Oxide, Sb_2O_3 .) *Syn.* Antimonii oxidum. Oxide of Antimony of the B.P., where *see* characters and tests. B.P. dose, 1 to 4 grains. Insoluble in water. *Homœopathic preparation.*—Trituration, &c. Am.H.P.—Trituration.

Antimonium Sulphuratum Aureum. *Syn.* Antimonii oxysulphuretum. A mixture containing sulphide and oxide of antimony (Sb_2S_3), and (Sb_2O_3). Sulphurated Antimony of the B.P. B.P. dose. Dose, 1 to 5 grains. *Homœopathic preparation.* — Trituration. Am.H.P.—Same.

ANTIMONIUM TARTARICUM. This is the Antimonium Tartaratum of the B.P. ($\text{KSbOC}_4\text{H}_4\text{O}_6, \text{H}_2\text{O}$). An oxytartrate of antimony and potassium. *Syn.* Antimonii Potassio-tartras; Antimonium Tartarizatum Tartar

Emetic. *For characters and tests.*—See B.P. Solubility 1 in 15 of cold water ; only partially soluble in proof spirit. B.P. dose. As a diaphoretic, $\frac{1}{12}$ th to $\frac{1}{4}$ th of a grain ; as an emetic, 1 to 2 grains. *Homœopathic preparations.*—Trituration ; solution in distilled water to which 5 per cent. of rectified spirit has been added for 1, 3x, and 2 ; dilute alcohol may be used after 2, and rectified spirit for 3 and upwards. *Dispensing forms.*—1x to 3, trituration ; or 1 to 5x, solution ; 3 and upwards, tincture, tincture-trituration, pilules, or globules.

Antirrhinum Linarium. (Ad.) *Linn.* N.O. Scrophulariaceæ. *Syn.* *Linaria vulgaris*. Common Toad Flax. Native of Europe. Flowers June to October. Am.H.P.—Tincture of the fresh plant as Class III.

Aphis Chenopodii Glauci. See CHENOPODIUM.

Apiol. (Ad.) Essential Oil, obtained from the Common Parsley, *Petroselinum sativum*. It acts on the nervous system. *Preparation.*—Solution in rectified spirit for 1x and upwards ; 1x and upwards, tincture, pilules, and globules.

APIS MELLIFICA. *Linn.* Class, Insecta ; Order, Hymenoptera ; Section, Aculeata ; Subsection, Mellifera ; Family, Apidæ. The Common Hive Bee. The active part is the poison emitted from the sting of the female, or working bee, when enraged (B.H.P.). Note : the working bee is not a perfect female. The ordinary hive bee is represented by three adult forms—namely, males, perfect females, and *workers*, or *undeveloped females*. These three forms are found together in the hive in the summer months ; at other seasons only the two forms of females. During the winter and spring the hive consists exclusively of a multitude of workers, or undeveloped females, and a single perfect female, or “queen.” *Homœopathic preparation.*—“Take a clean, wide-mouthed, stoppered bottle, and, standing by the side of a beehive in full work, place the mouth of the bottle against the entrance to the hive, so as to catch the bees as they emerge from it, closing every aperture to prevent their escape on either side (the early morning is the safest time for doing this) ; then strike the hive sharply and repeatedly with a cane, until a sufficient

number have been introduced into the bottle, where they become much irritated by their imprisonment, and try vainly to sting the operator's hand through the glass. While they are still enraged, introduce a few drops of chloroform, and as soon as they are stupefied shake them out of the bottle, pick out all the drones, cut off the posterior half of the abdomen of each female bee with sharp scissors, and let it drop into a glass or porcelain capsule, the weight of which has been previously ascertained. Re-weigh the whole, and having calculated the weight of the particles, place them in a mortar, pour over them a sufficiency of dilute alcohol to cover them, and then bruise carefully till the whole is reduced to a pulp; return the pulp into the bottle, and carefully wash the capsule and mortar with dilute alcohol, transferring the washings also into the bottle, using in all 10 fluid ounces to every ounce by weight. Put in the stopper, and let the parts macerate for two days, shaking repeatedly, so that any of the poison which has been ejected against the glass may be taken up by the spirit. Afterwards filter the tincture, but do not press the pieces of bee. *Test.*—If well prepared, it will cause an erythematous patch of about the size of a shilling when the skin is pricked by a needle previously dipped in the tincture. The 1x attenuation should be prepared with dilute alcohol, 1 with proof spirit, 3x with spirit 20 O.P., and all above with rectified spirit" (B.H.P.) *Dispensing forms.*— ϕ and upwards, tincture, pilules, or globules. N.B.—Tincture-trituration could be made of ϕ , but it is not recommended. Am.H.P.—The live bees put into a bottle are irritated by shaking, and then drenched with five times their weight of dilute alcohol, and allowed to remain eight days, being shaken twice a day, afterwards strained and filtered.

Apocynum Androsæmifolium. N.O. Apocynaceæ.

American Dogsbane, Bitter Root, Spreading Dogsbane. Habitat, borders of thickets; common in North America. Flowers from June to July. Part employed, the whole plant, or the root. *Preparation.*— ϕ tincture of the plant, corresponding with proof spirit; ϕ tincture of the root, using proof spirit; ϕ , 1x and upwards, pilules or globules;

tincture-trituration. Am.H.P.—Tincture from the fresh root as Class III.

APOCYNUM CANNABINUM. Linn. N.O. Apocynaceæ.

Syn. Apocynum pubescens. American Indian Hemp. Habitat, Canada and United States. *Homœopathic preparation.*

—Tincture of the fresh root, corresponding in alcoholic strength with proof spirit, prepared in, and imported from, North America. Process I.— ϕ tincture from the imported dry root. *Dispensing forms.*— ϕ and upwards, tincture, tincture-trituration, pilules, or globules. *Characters of the root.*—Horizontal, 5 or 6 feet in length, about one-third of an inch thick, dividing near the end into branches which terminate abruptly; of a yellowish-brown colour when young, but dark chestnut when old; of a strong odour, and a nauseous, somewhat acrid, permanently bitter taste. In the dried state it is brittle, and readily pulverized, affording a powder like that of ipecacuanha. Am.H.P.—Tincture of the fresh root, Class III.

Apocynin. (Ad.) (Resinoid of Apocynum Cannabinum.)

Homœopathic preparation.—Trituration.

Apomorphinum. (Apomorphinæ Hydrochloras of the B.P.,

$C_{17}H_{17}NO_3HCl$.) Hydrochlorate of morphia. May be obtained from the operative chemist. Am.H.P.—The same. Used homœopathically for sea-sickness. Soluble 1 in 50 of water, more soluble in alcohol. *Homœopathic preparation.*—Trituration, &c.

AQUA DESTILLATA. (Distilled Water, H_2O .) The purest distilled water only should be used, and should answer the following B.P. tests:—"A fluid ounce of it evaporated in a clean glass capsule leaves scarcely a visible residue. It is not affected by sulphuretted hydrogen, oxalate of ammonium, nitrate of silver, chloride of barium, solution of lime, or a mixture of starch, mucilage, and iodide of potassium. It gives only a faint yellow coloration when a solution of potassio-mercuric iodide is added to 3 or 4 ounces." When preparing distilled water, the first half-gallon should be rejected, preserving the next eight gallons. A still lined with tin, and connected with a block-tin worm, should be used.

Aquilegia Vulgaris. Linn. (Ad.) N.O. Ranunculaceæ.

Columbine. Indigenous to Europe, growing in woods and

woody low grounds; also cultivated. Am.H.P.—Tincture from the fresh uncultivated plant when in bloom, Class III.

Aralia Hispidia. (Ad.) N.O. Araliaceæ. Bristly Sarsaparilla, Wild Elder, Dwarf Elder. Found growing in rocky places in North America. Am.H.P.—Tincture from the fresh root, Class III.

Aralia Racemosa. N.O. Araliaceæ. American Spikenard. Habitat, rich woodlands of America. Flowers in July. Well known for its spicy, aromatic, large roots, proving of which is given in Hale's "New Remedies." *Preparation.*— ϕ tincture of the fresh root, ϕ 1x and upwards, tincture, pilules, and globules; tincture-trituration, ϕ , tincture of the dry root. Am.H.P.—Tincture from the fresh root, Class III.

Aranea Diadema. Class, Arachnida; Order, Araneidea; Family, Epeiridæ. *Syn.* Epeira diadema. Garden, or Papal Cross Spider. This spider is found all over Europe and America, in stables, on old walls, &c. *Characters.*—Body ovoid, often as large as a small nut; a longitudinal line on the back, composed of yellow and white points, and traversed by three other similar lines. *Preparations.*—Tincture of the entire animal, using one live spider to every 100 minims of proof spirit, and macerating for ten or twelve days; trituration. Am.H.P.—The live animal is crushed and prepared as Class IV.

Aranea Scinencia. It is described in Allen's Encyclopædia as "a grey spider found in Kentucky on old walls; does not spin a web." *Preparations.*—Tincture of the whole animal, using proof spirit; trituration. Am.H.P.—Same as Aranea diadema.

Arctium Lappa. N.O. Compositæ. *Syn.* Lappa major. Common Burdock. Habitat, all over Europe, and many parts of America. Flowers from July to October. *Preparation.*— ϕ tincture of the fresh root corresponding with proof spirit; ϕ , 1x and upwards, tincture, pilules, tincture-trituration. Average loss of moisture, 74 per cent. Am.H.P.—Tincture from the fresh root, collected in spring, as Class III.

Argenti Ammonio-Chloridum. (Ad.) This is a solution of chloride of silver in an excess of ammonia. *Preparation.*—Solution in distilled water.

Argentum Cyanatum. (Argentive cyanide, AgCN .)

Syn. Argenti cyanidum. Can be obtained from the operative chemist. *Preparation.*—Trituration, which must be kept in amber glass bottles.

Argentum Iodatum. (Argentive Iodide, AgI .) *Syn.*

Argenti iodidum. May be obtained from the operative chemist. *Preparation.*—Trituration, which must be kept in amber glass bottles.

ARGENTUM METALLICUM. *Syn.* Argentum foliatum

(Silver Leaf), Argentum præcipitatum (Precipitated Silver). Silver. "The silver used must be chemically pure, and hence it is best to prepare it from the purified nitrate (1) by precipitation with hydrochloric acid, and then fusing the carefully washed and dried chloride with anhydrous carbonate of soda. The metal can then be beaten into the thinnest leaf by a trustworthy gold and silver beater; or (2) it may be precipitated in a pure and finely divided state by boiling with formic acid a solution of 1 part of the nitrate in at least 500 parts of water, and then carefully washed and dried." B.H.P. *Preparation.*—Trituration. *Dispensing forms.*—1x to 3, trituration only; 4 and upwards, tincture, tincture-trituration, pilules, or globules. Am.H.P.—Pure silver in powder triturated as Class VII.

Argentum Muriaticum. (Argentive Chloride, AgCl .)

Syn. Argenti Chloridum. Can be obtained from the operative chemist. *Preparation.*—Trituration, which should be kept in amber glass bottles.

ARGENTUM NITRICUM. (Argenti Nitras, AgNO_3 of

the B.P.) Nitrate of Silver, Lunar Caustic. For preparation, characters and tests, *see* B.P. Solubility, 100 grains in 50 minims of water, measuring 80 minims; 1 in 15 of rectified spirit. B.P. dose, $\frac{1}{2}$ to $\frac{1}{3}$ grain. *Homœopathic preparation.*—Solution in distilled water for 1x; continue to use distilled water up to 3, then use dilute alcohol for 4, and afterwards rectified spirit. The attenuations should be kept in amber glass-stoppered bottles. The salt ought not to be prepared as a trituration. *Dispensing forms.*—Below 4, watery solution only; 4, dilute tincture only; 5 and upwards, tincture, tincture-trituration, pilules, or

globules. Am.H.P.—*See* Class V., using water to 3*x*, and dilute alcohol for 2, and then strong alcohol.

Argentum Oxydatum. (Argentive Oxide, Ag_2O .) *Syn.* Argenti oxidum. Can be obtained from the operative chemist. *Preparation.*—Trituration, which must be kept in amber glass bottles.

Argentum Phosphoricum. (Tri-argentive Phosphate, Ag_3PO_4 .) *Syn.* Argenti phosphas. Can be obtained from the operative chemist. *Preparation.*—Trituration, which must be kept in amber glass bottles.

Aristolochia Clematitis. *Linn.* (Ad.) N.O. Aristolochiaceæ. *Syn.* A. vulgaris. Long Birth-wort, Aristolochy. Indigenous to Southern Europe. Am.H.P.—Tincture from fresh root in April or September, Class III.

Aristolochia Milhomens. N.O. Aristolochiaceæ. *Syn.* A. grandiflora, A. cymbifera. Brazilian Snake-root. *Preparation.*— ϕ tincture of the flowers. ϕ 1*x* and upwards, tincture, pilules, &c.; tincture-trituration. Am.H.P.—Tincture from the flesh flowers, Class III.

Aristolochia Serpentari. N.O. Aristolochiaceæ. *Syn.* Serpentaria Virginiana. Virginia Snake-root, Serpentary Root. Habitat, rich woods from Connecticut to Indiana and southward; common near the Alleghany mountains. Flowers in July. *Preparation.*— ϕ tincture of the rhizome, as imported, using proof spirit; ϕ , 1*x* and upwards, tincture, pilules, &c.; tincture-trituration.

Armoracia. *See* COCHLEARIA ARMORACIA.

ARNICA MONTANA. *Linn.* N.O. Compositæ. Mountain Arnica, Leopard's Bane. Habitat, mountainous parts of middle and Southern Europe. Flowering time, July and August. Parts employed (1) the entire fresh plant, including the root; (2) the flowers; (3) the root. *Characters.*—Rhizome from 1 to 3 inches long, and 2 or 3 lines thick, cylindrical, contorted, rough from the scars of coriaceous leaves, and furnished with numerous long, slender fibres; has a peppery taste and peculiar odour; leaves ovate, entire, sessile on the crown of the root; stem 6 to 7 inches high, round, and unbranched, rising from the centre of the crown of leaves; flowers large, rayed, and of a beautiful yellow; fruit, a hairy pappus; involucre consisting of two

rows of scales. *Preparations*.—1. Tincture of the entire fresh plant, made in its native country, corresponding in alcoholic strength with proof spirit; 2. Tincture of the dried flowers only, using proof spirit; 3. Tincture of the root only, using proof spirit. Process I. in each case. *Dispensing forms*.— ϕ and upwards, tincture, tincture-trituration, pilules, or globules. N.B.—A good tincture for external use can be made by mixing 2 parts of the powdered root with 1 part each of flowers and leaves, using in the proportion of 1 part of this mixture to 10 of proof spirit. Am.H.P.—At the time of blooming gather besides the root, which is the most important part, also the root-leaves, and full-blown flowers, which latter are to be taken out of the calyx, to remove the larvæ of the *Musca arnica* from the receptacle. Two parts of the root, 1 part of the herb, and 1 part of the flowers are pounded, &c., and prepared as Class III.

Arnica Ball. (Ad.) White wax, 5 ozs.; spermaceti, 3 ozs.; oil of almonds, 3 ozs.; tincture of arnica, $1\frac{1}{2}$ drachm. Melt, and when nearly cold, stir in the arnica, and pour into boxes or gallipots.

Arnica Cerate. (Ad.) Spermaceti, 3 ozs.; white wax, 6 ozs.; olive oil, 14 fluid ozs.; melt in a water bath, and when nearly cold stir in 3 ozs. tinct. arnica and pour into bottles.

Arnica Liniment. Simple liniment (B.H.P.), 7; tinct. arnica, 1. Mix.

Arnica Opodeldoc. (Ad.) Plain opodeldoc (*see* under OPODELDOC), 7 ozs.; tinct. arnica, 1 oz. When cool, pour into bottles, and allow it to become solid in as cold a place as possible.

Arnica and Rhus Opodeldoc. (Ad.) Plain opodeldoc (*see* under OPODELDOC), 7 ozs.; tinct. arnica and rhus, of each, $\frac{1}{2}$ oz. When cool, pour into bottles, and allow it to become solid in as cool a place as possible.

Arnicated Glycerine. (Ad.) Glycerine, 7; tinct. arnica, 1. Mix.

ARSENICUM ALBUM. (Arsenious Anhydride of the B.P., As_2O_3 .) *Syn.* Arsenic, Anhydrous Arsenious Acid, Acidum arseniosum. Arsenious Acid, White Arsenic. It may be purified by further sublimation as follows:—

"Place the powdered arsenious acid in the centre of a shallow porcelain dish, in a heap shaped so as to correspond nearly with the shape of the dish, and invert over it a smaller shallow dish of the same material, furnished with a flat rim; cover this with an inverted beaker, accurately fitted, to prevent the escape of any fumes which may issue from the apertures below it, and apply a heat by means of a sand bath placed under a flue, until the sublimate obtained ceases to have either a pink or yellow tint; cleanse the upper porcelain dish, and continue the sublimation slowly until the operation is completed" (B.H.P.). For characters and tests *see* B.P. Solubility, 1 in 100 of cold water; 1 in 20 of boiling water; 1 in 500 of rectified spirit.

Preparations.—Solution as follows: Take 96 grains in powder, and put it into a flask capable of holding 30 fluid ounces; then add 20 fluid ounces of distilled water; mark the flask, to denote the quantity, so that distilled water may be supplied from time to time to replace that which evaporates; boil constantly until the whole of the arsenious acid is taken up, and the solution has been reduced to 15 fluid ounces, and when cold add sufficient rectified spirit to increase the bulk to one pint; the $3x$ should be made with spirit 20 O.P., and all above that with rectified spirit: trituration. *Dispensing forms.*— $1x$ to 3, trituration; or 1, solution; $3x$ and upwards, tincture, tincture-trituration, pilules, or globules. B.P. dose, $\frac{1}{20}$ to $\frac{1}{15}$ of a grain. Am.H.P.—Solution in distilled water, with 10 per cent. of alcohol, 1 in 100. Dilute as Class VI. *b*. Trituration as Class VII.

Arsenicum Citrinum. (Arsenious Sesquisulphide, As_2S_3 .)

Syn. Arsenicum sulphuratum flavum. Orpiment, yellow native Sulphide of Arsenic. Can be obtained from the operative chemist. *Preparation.*—Trituration to 3, &c. Am.H.P.—The same.

Arsenicum Hydrogenosum. (Trihydride of Arsenic, AsH_3 .) Arsine, Arseniuretted Hydrogen. Prepared by fusing metallic arsenic with its own weight of granulated zinc, and decomposing the alloy with hydrochloric acid. A very poisonous, colourless, gas, with a strong garlic smell, burning with a blue flame if ignited, and depositing metallic arsenic on the sides of a cool tube held over the flame.

Preparation.—Solution in distilled water, which absorbs one-fifth of its volume properly diluted. Am.H.P.—Solution, 10 per cent., and dilutions as Class V. *a.* N.B.—The greatest care is required to avoid the inhalation of the smallest portion of this deadly gas.

Arsenicum Iodatum. (Arsenii Iodidum.) Iodide of Arsenium of the B.P., AsI_3 . *Syn.* Iodide of Arsenic; Arsenious Iodide. For characters and tests *see* B.P. Readily and almost entirely soluble in water and in rectified spirit. B.P. dose, $\frac{1}{30}$ of a grain. *Homœopathic preparation.*—Trituration, solution in water, &c. Am.H.P.—The same.

Arsenicum Metallicum. (Metallic Arsenic, As.) “Prepared by mixing arsenious anhydride with charcoal, and decomposing it at a dull red heat; the metallic arsenic passes off in vapour, and is deposited in crystals on the cool part of the apparatus employed, which, when a small quantity only is required, may conveniently consist of a glass tube” (B.H.P.). Can be obtained pure from the operative chemist. *Preparation.*—Trituration. Am.H.P.—The same.

Arsenicum Rubrum. (Arsenious Sulphide, As_2S_3 .) Realgar, Red Realgar, the red native Sulphide. May be obtained from the operative chemist. *Preparation.*—Trituration to 3, &c. Am.H.P.—Trituration.

Artemisia Abrotanum. *Linn.* N.O. Compositæ. *Syn.* Abrotanum mas. Southernwood, Old Man. Native of Asia and Europe. *Preparation.*—Tincture of the leaves and stems. Am.H.P.—Tincture from fresh leaves in July or August, Class III.

Artemisia Absinthium. *Linn.* N.O. Compositæ. *Syn.* Absinthium vulgare. Common Wormwood. Native of Europe. *Preparation.*—Tincture of the fresh young leaves and flowers, 20 O.P. spirit. Am.H.P.—Tincture of fresh young leaves and blossoms, Class III.

Artemisia Vulgaris. *Linn.* N.O. Compositæ. Mugwort. *Preparation.*—Tincture of the root, 20 O.P. spirit. Am.H.P.—Tincture of fresh root, Class III.

Arum Dracontium. (Ad.) N.O. Araceæ. Green Dragon, Dragon Root. Found in low grounds along streams.

Flowering time, June. *Preparations*.—Trituration, tincture.

ARUM MACULATUM. *Linn.* N.O. Araceæ. *Syn.* Barba Aaronis, Serpentina minor, Zingiber album, Z. Germanicum, Cuckoo Pint, Wake Robin, Lords and Ladies. "Habitat, in woods and thickets, and under hedges chiefly in Central Europe; frequent in England and Ireland. Flowering time, spring. Part employed, the fresh tuber or corm. *Characters*.—An acrid white tuber or corm, brownish-yellow externally, having an acrid biting taste like pepper, and abundance of milky juice. Leaves radical, ovate-hastate, of a dark shining green, frequently spotted with purple, or marked with pale, whitish veins. Time for collecting, before the leaves are fully developed. It should always be procured with the herbaceous part attached, as it is otherwise difficult to identify" (B.H.P.). *Preparation*.—Tincture, corresponding in alcoholic strength with dilute alcohol. Process I. *Dispensing forms*.— ϕ and upwards, tincture, tincture-trituration, pilules, or globules. Average loss of moisture, 85 per cent. Am.H.P.—Tincture from the fresh roots, Class I.

Arum Triphyllum. *Linn.* N.O. Araceæ. *Syn.* Arisæma atrorubens. Indian Turnip, Dragon Root. Very similar to *Arum maculatum*. Habitat, rich woods of America. Part employed, the fresh tuber or corm. *Preparation*.—Dr. Hale recommends a rapid trituration of the expressed juice of the freshly-gathered root with 10 parts of sugar of milk, and preserved in hermetically sealed bottles guarded from light and heat. The active principle is very volatile. N.B.— ϕ tincture is made; ϕ , 1x, and upwards, tincture, pilules, &c.; tincture-trituration. Am.H.P.—Tincture of fresh root in early spring, Class III.

Arundo Mauritanica. (Ad.) N.O. Gramineæ. An Italian grass. Am.H.P.—The fresh root sprout is used; tincture; Class III.

ASAFOETIDA. (Narthex Asafoetida.) N.O. Umbelliferæ. *Syn.* Ferula Narthex, Asafoetida disgunensis. Asafoetida of the B.P. Habitat, Persia, Afghanistan, and the Punjab. Part employed, the gum-resin, obtained by incision from the living root. B.P. dose, 5 to 20 grains. *Prepara-*

tion.—Tincture of the gum-resin as imported, using rectified spirit. Process III. *Dispensing forms*.— ϕ and upwards, tincture, tincture-trituration, pilules, or globules. Am.H.P.—Tincture, Class IV.

Asarum Canadensis. (Ad.) N.O. Aristolochiaceæ. Wild Ginger, Canada snake-root. Am.H.P.—Tincture from fresh root, Class III.

Asarum Europæum. Linn. N.O. Aristolochiaceæ. *Syn.* Asarum vulgare. Asarabacca, Fole's Foot, Hazelwort, Wild Nard. "Habitat, mountainous woods in most parts of Europe; rare in Britain, except in a few localities in Northern England, and in Wiltshire. Flowering time, May. Parts employed, the entire plant, including the root. *Characters*.—A shortly creeping root stock, with two kidney-shaped leaves on long stalks; between them a single greenish-brown flower, about half an inch long, on a short re-curved stalk; perianth divided to the middle into three broad pointed lobes. The leaves, as they fade, emit a peculiar pungent odour. Time for collecting, when in flower." B.H.P. *Preparation*.—Tincture, corresponding in alcoholic strength with proof spirit. Process I. *Dispensing forms*.— ϕ and upwards, tincture, tincture-trituration, pilules, or globules. Am.H.P.—Tincture from the entire fresh plant, Class I.

Asclepias Incarnata. (Ad.) N.O. Asclepiadaceæ. Flesh-coloured Asclepias, White Indian Hemp. Found in all parts of the United States. Am.H.P.—Tincture from the fresh root, Class III.

Asclepias Syriaca. *Syn.* Asclepias Cornuti. N.O. Asclepiadaceæ. Silk Weed. Habitat, North America. *Preparations*.—Tincture of the fresh root; trituration of the dried root. Am.H.P.—Tincture of the fresh root, Class III.

Asclepias Tuberosa. N.O. Asclepiadaceæ. Pleurisy Root, Butterfly Weed. Habitat, the United States. *Preparations*.—Tincture of the root. Trituration. Am.H.P.—Tincture of the fresh root, Class III.

Asclepias Vincetoxicum. (Ad.) N.O. Asclepiadaceæ. White Swallow Wort. Grows in rocky places throughout the greater part of Europe. Am.H.P.—Tincture of the fresh leaves as Class II.

- Asimina Triloba.** (Ad.) Anonaceæ. Common Papaw. Found in United States. Am.H.P.—Tincture of the ripe seeds as Class IV.
- Asparagus Officinalis.** N.O. Liliaceæ. Asparagus as used for food. *Preparation.*—Tincture of the young shoots, dilute alcohol. Am.H.P.—Tincture of the young sprouts as Class III.
- Asperula Odorata.** (Ad.) N.O. Rubiaceæ. Sweet-scented Wood-ruff. Native of Europe. Am.H.P.—Tincture of the fresh herb, shortly before coming into bloom in April or May, as Class III.
- Aspidium Athamanticum.** (Ad.) N.O. Filices. A species of fern growing in South Africa, and called by the Kaffirs in the vicinity of Natal, Inkomankomo, or Uncomocomo. Part employed, the root, named by same, Panna. Time for collecting, the summer. *Preparation.*—Tincture.
- Aspidosperma Quebracho.** See QUEBRACHO.
- Asplenium Scolopendrium.** (Ad.) N.O. Polypodiaceæ. Hart's Tongue. A fern indigenous to Europe. Am.H.P.—Tincture of fresh leaves as Class III.
- Astacus Fluviatilis.** See CANCER ASTACUS.
- Asterias Rubens.** *Syn.* Uraster Rubens. Common Star Fish. *Preparation.*—Tincture of the entire living animal prepared as follows:—"Wash the animals in distilled water, dry them with a cloth, weigh them and cut them in pieces, bruise to a pulp, and add to each ounce by weight 4 fluid ounces of rectified spirit; triturate the mass with the spirit, and then transfer it to a wide-mouthed bottle and macerate for eight days, shaking the bottle twice daily; finally filter" (B.H.P.). Am.H.P.—Tincture of the live animal as Class IV.
- Athamanta Oreoselinum.** N.O. Umbelliferae. *Syn.* Peucedanum, or Apium montanum. Mountain Parsley, found in Central Europe. *Preparation.*— ϕ tincture of the fresh herb, corresponding with proof spirit; ϕ , 1x and upwards, tincture, pilules, &c.; tincture-trituration.
- Atriplex Olidum.** (Ad.) N.O. Chenopodiaceæ. Stinking Blite, or Goosefoot. Native of Europe. Am.H.P.—Tincture of the fresh plant as Class III.
- Atropinum.** (Atropine, or Atropia, $C_{17}H_{23}NO_3$.) An alka-
H.P. E

loid obtained from belladonna. *Characters and tests.*—See B.P. *Preparations.*—Trituration ; solution in rectified spirit. *Dispensing forms.*— $3x$ to 3, trituration ; or $3x$ and upwards, tincture, tincture-trituration, pilules, or globules. Solubility, 1 in 500 of water, 1 in 3 of rectified spirit. It is thought dangerous for internal use stronger than $3x$, though it has been given in doses of gr. $\frac{1}{30}$ to $\frac{1}{15}$. The No. 1 tincture should be used with caution. Used externally to the eyes to dilate the pupils. Am.H.P.—Trituration, Class VII.

Atropinum Sulphuricum. (Atropic Sulphate, Sulphate of Atropine.) *Syn.* Atropinæ sulphas, Atropiæ sulphas, Sulphate of atropia. For preparation, characters and tests, see B.P. A powerful poison. *Homœopathic preparation.*—Solution in distilled water for $1x$, using distilled water to which 5 per cent. of rectified spirit has been added for 1, dilute alcohol for $3x$, and after that rectified spirit. *Dispensing forms.*—1 and $3x$, solution only ; 2 and upwards, tincture, tincture-trituration, pilules, or globules. Freely soluble in water, 1 in 3 of rectified spirit. Like atropia, the sulphate has been given in doses of gr. $\frac{1}{30}$ to $\frac{1}{15}$. Am.H.P.—Trituration, Class VII.

Attenuations.—The drugs used in homœopathic practice are attenuated in a systematic manner, the insoluble remedies first by trituration with sugar of milk, the soluble drugs by solution, either in water first and afterwards attenuated with alcohol, or with alcohol at once. There are two scales employed, viz., the Decimal (1 in 10) and the Centesimal (1 in 100), the former being now almost exclusively used.

THE DECIMAL SCALE.

FROM THE MOTHER (ϕ) TINCTURE.

One measure of ϕ added to 9 of spirit forms	$\frac{1}{x}$	1st decimal.
One measure of $\frac{1}{x}$ added to 9 of spirit	$\frac{2}{x}$	2nd decimal, or 1st centesimal.
One measure of $\frac{2}{x}$ added to 9 of spirit	$\frac{3}{x}$	3rd decimal.

One measure of $\frac{3}{x}$ added to 9 of spirit forms $\frac{4}{x}$, 4th decimal,
or 2nd centesimal.

One measure of $\frac{4}{x}$ added to 9 of spirit „ $\frac{5}{x}$, 5th decimal.

One measure of $\frac{5}{x}$ added to 9 of spirit „ $\frac{6}{x}$, 6th decimal,
or 3rd centesimal;

and so on.

For the $1x$ attenuation use the same degree of alcohol that the ϕ tincture is prepared with, and for the $2x$ also if there is any appearance of precipitation, and afterwards 60 O.P. must be used.

THE CENTESIMAL SCALE.

FROM THE MOTHER (ϕ) TINCTURE.

One measure of ϕ added to 99 of spirit forms 1 cent., or $2x$.

One measure of 1 added to 99 of spirit „ 2 cent., or $4x$.

One measure of 2 added to 99 of spirit „ 3 cent., or $6x$.

One measure of 3 added to 99 of spirit „ 4 cent., or $8x$.

One measure of 4 added to 99 of spirit „ 5 cent., or $10x$;

and so on, as high as required.

As before stated it is usual to prepare the attenuations on the decimal scale, but as Hahnemann carried out the plan of diluting on the centesimal scale, we give the above table, which at any rate may be used when preparing the high attenuations.

THE DECIMAL SCALE.

FROM THE CRUDE SOLUBLE DRUG.

Ten grains of the drug in water, diluted alcohol or alcohol made up to 100 minims will represent the $\frac{1}{x}$ or 1st decimal attenuation.

One measure of the $\frac{1}{x}$ added to 9 of diluted alcohol, or alcohol,

will represent the $\frac{2}{x}$ 2nd decimal
or 1st centesimal attenuation;

and so on, using at first water or diluted alcohol and afterwards using it stronger until the third centesimal attenuation may be made with 60 O. P. In some instances we use alcohol at once, as in benzoic acid, but directions are given with each remedy in the Dictionary.

For the attenuation of insoluble substances, *see* Triturations. For converting triturations into liquid attenuations we give the following table, the attenuation having been carried by trituration with sugar of milk as high as the third centesimal or sixth decimal.

THE DECIMAL SCALE.

FROM THE NO. 3 TRITURATION.

- 10 grains of No. 3, dissolved in water with 5 per cent. of spirit, the whole to measure 100 minims, forms 7x.
- 10 minims of 7x, added to 90 minims of 20 O.P. spirit, forms No. 4, or 8x.
- 10 minims of 8x, added to 90 minims of 60 O.P. spirit, forms 9x, and so on, with 60 O.P. for the remainder.

THE CENTESIMAL SCALE.

FROM THE NO. 3 TRITURATION.

- 1 grain of No. 3, dissolved in 50 minims of water, and spirit added to 100 minims, forms No. 4 cent.
- 1 measure of No. 4, added to 99 of rectified spirit, forms 5 cent.
- 1 measure of No. 5, added to 99 of rectified spirit, forms 6 cent. ; and so on with rectified spirit.

In making the attenuations use only clean new bottles with new corks, and shake each one by giving about ten powerful downward strokes of the arm.

Some confusion has arisen with regard to the application of the various attenuations ; for instance, the question may be naturally asked why call a 10 per cent. solution of benzoic acid the first decimal attenuation and a tincture of Aconite or Bryonia 1 in 10 the mother preparation, but custom to a great extent must be our guide, and the following rules are given in the B.H.P. :—

"The process of attenuation always commences from a point termed zero, and marked ϕ or θ ; but the actual amount of medicinal substance contained in the zero differs materially, thus:—In all instances where trituration or solution in distilled water is had recourse to, the ϕ represents the pure medicinal substance; *e.g.*, Acid. Nitric. ϕ , Arsen. ϕ , Kali Iod. ϕ , Brom. ϕ , Carbo. Veg. ϕ , &c., always refer to the pure substance itself; and hence, in such cases, the 1st decimal attenuation contains 10 per cent. of the pure drug. On the contrary, in all cases where tinctures are made, the strong tincture, and not the crude material, is marked ϕ , and, as a consequence, the 1st decimal attenuation contains 10 per cent. of the tincture, and not 10 per cent. of the pure drug. Since in the present Pharmacopœia the proportion of 1 in 10 has been fixed, whenever possible, for the strength of the mother tincture, it follows that the 1st decimal attenuation of a mother tincture corresponds in medicinal strength to the 1st centesimal attenuation of a trituration or watery solution; and when it is impossible to make the mother tincture in the proportion of 1 in 10, the first decimal attenuation is still made to represent 1 in 100 of the drug, by using a proportionate quantity of such mother tincture. For example, when the mother tincture is 1 in 15, as may happen with belladonna or calendula, 15 measures of such tincture would require 85 measures of the suitable spirit to make the first decimal. This uniformity of strength of the mother tinctures thus gets rid of much of the uncertainty which has hitherto existed as to the actual quantity of medicine contained in these preparations; but it would have been more satisfactory to have adopted one uniform standard for all. It was found, however, after much deliberation, that a change of this kind would, for a time at least, lead to so much confusion that it has been deemed advisable not to make any such radical change. It is very necessary to adopt a uniform use of the sign ϕ , since much confusion is caused by different persons employing it in different senses. The following are the rules for its application:—1. It is used principally to denote the strongest officinal tincture, as Acon. ϕ , Arnica ϕ , Canth. ϕ ; and these, according to the Pharmacopœia, have

an almost uniform strength of 1 in 10. 2. It is used to denote the strongest official preparation of any substance when its actual strength is unknown, as *Caut. φ*, together with the animal poisons, as *Apis φ*, *Aranea φ*, *Lachesis φ*, &c. 3. It should never be used to denote 1 *x* solution of any substance in alcohol or water, when the crude substance itself has a definite chemical composition; for example, *Brom. φ*, *Glonoin. φ*, *Kali Iod. φ*, *Kreas. φ*, *Merc. Cor. φ*, *Tereb. φ*, &c., should always mean the pure substances themselves, and their strongest official solutions should be denoted *Brom. 1x*, *Glonoin. 1x*, *Kali Iod. 1x*, *Kreas. 1x*, *Merc. Cor. 1x*, *Tereb. 1x*, &c. In short, the sign *φ*, when meaning mother tincture, should be strictly limited to the strongest solutions in alcohol of substances which have not a definite chemical composition in their crude state. From what has been stated it will be seen that *φ* means the crude substance in the case of all the official acids, of all substances which are triturated, and in the case of the following medicines, viz. :—

Alumen	Cupr. acet.	Morph. acet.
Ammon. carb.	Cupr. sulph.	Morph. mur.
Ammon. caust.	Ferr. acet.	Narcotinum
Ammon. mur.	Ferr. iod.	Natr. carb.
Argent. nit.	Glonoinum	Natr. mur.
Arsenicum	Iodium	Natr. nit.
Atropinum	Kali bich.	Natr. sulph.
Atrop. sulph.	Kali brom.	Ol. animale
Aur. mur.	Kali carb.	Ol. crotonis
Bar. acet.	Kali chlor.	Phosphorus
Bar. mur.	Kali iod.	Plat. mur.
Borax	Kali nit.	Plumb. acet.
Bromium	Kreasotum	Plumb. nit.
Calc. acet.	Mag. mur.	Strychninum
Calc. caust.	Mag. sulph.	Sulphur
Chin. sulph.	Mang. acet.	Terebinth.
Cinch. sulph.	Merc. corr.	Veratrinum
Codeinum	Morphinum	Zinc. sulph."
Copaiba.		

When marking the attenuations, the following list will

be of service, starting from the ϕ (mother) tincture or preparation.

ϕ = matrix or mother preparation.

$\frac{1}{x}$ = First decimal preparation.

$\frac{2}{x}$ = second decimal or first centesimal preparation,
often marked 1.

$\frac{3}{x}$ = Third decimal preparation.

$\frac{4}{x}$ = Fourth decimal or second centesimal preparation,
often marked 2.

$\frac{5}{x}$ = Fifth decimal preparation.

$\frac{6}{x}$ = Sixth decimal or third centesimal preparation,
often marked 3.

$\frac{7}{x}$ = Seventh decimal preparation.

$8x, 9x, 10x, \&c., \&c.$

At one time the 1st, 2nd, and 3rd decimal were known as A., B., C., but this plan is almost obsolete.

Aurum Arseniosum. (Ad.) Arseniate of Gold. *Preparation.*—Trituration.

AURUM METALLICUM. (Gold, Au.) *Syn.* Aurum foliatum (Gold Leaf), Aurum præcipitatum (Precipitated Gold.) "Chemically pure gold (1) beaten into the thinnest leaf; or (2) precipitated in a finely-divided state by the addition of oxalic acid to a solution of 1 part of the pure trichloride in at least 500 parts of water, and carefully washed and dried. *Characters.*—Thin leaf of a rich yellow colour and high metallic lustre, or a very fine powder, which, when suspended in water, is brown by reflected, but purple when viewed by transmitted, light" (B.H.P.). *Preparation.*—Trituration. *Dispensing forms.*— $1x$ to 3, trituration only; 4 and upwards, tincture, tincture-trituration, pilules, or globules. Am.H.P.—Triturations of the precipitated metal.

AURUM MURIATICUM. (Auric Chloride, $AuCl_3$.) Trichloride of Gold. Prepared by dissolving pure gold in nitro-hydrochloric acid, as directed in the B.P. 1867. Take

of fine gold, reduced by a rolling machine to a thin lamina, 62½ grains; nitric acid, 1½ fluid ounce; hydrochloric acid, 7 fluid ounces; distilled water, a sufficiency. Place the gold in a flask with the nitric acid and 6 fluid ounces of the hydrochloric acid, first mixed with 4 fluid ounces of the water, and digest until it is dissolved. Add to the solution the additional fluid ounce of hydrochloric acid, evaporate at a heat not exceeding 212°, until acid vapours cease to be given off. Dissolve the chloride of gold thus obtained in a fluid ounce of the water, and then dilute the solution with more water, until it has the exact bulk of 2 fluid ounces. *Preparation.*—The solution recommended above forms the 1x attenuation; distilled water is used for 1, dilute alcohol up to 2, and rectified spirit beyond 2. The attenuations should be kept in amber glass-stoppered bottles. *Dispensing forms.*—1x to 2, solution only; 5x and upwards, tincture, tincture-trituration, pilules, or globules. Am.H.P.—Pure chloride of gold is dissolved in 9 parts by weight of distilled water; triturations as Class VII.

Aurum Muriaticum Natronatum. (Sodium Chloroaurate, $\text{NaClAuCl}_2 \cdot 2\text{H}_2\text{O}$.) *Syn.* Auri et natri chloridum. Prepared by mixing solutions of the chlorides of gold and sodium, and crystallizing. *Preparation.*—Solution in distilled water for 1x and 1, using dilute alcohol for 3x and 2, and rectified spirit for all above 2. Am.H.P.—Trituration, Class VII.

Aurum Sulphuratum. (Ad.) (Auric Sulphide.) *Syn.* Aurum sulphuricum. Black Sulphuret of Gold. Am.H.P.—Trituration, Class VII.

Badiaga. (Ap.) An organic substance found under fresh water in Russia, stated by some to be a siliceous sponge, by others to be a Conferva. *Preparation.*—Trituration of the dried substance; φ tincture. Am.H.P.—Tincture of the dried and pulverized sponge, as Class IV.; Triturations, Class VII.

Balsamum Peruvianum. (Myroxylon Pereiræ.) N.O. Leguminosæ. *Syn.* Myrospermum Peruiferum. Balsam

of Peru of the B.P. *Preparation*.—Solution in rectified spirit for 1*æ* and upwards; pilules and globules; tincture-trituration. Soluble in equal parts of rectified spirit. B.P. dose, 10 to 15 minims. Am.H.P.—Tincture, Class VI. *a*.

BAPTISIA TINCTORIA. N.O. Leguminosæ. *Syn.* Sophora tinctoria, Podalyria tinctoria. Wild Indigo. Habitat, dry hills, Canada to Florida, and west to Mississippi. Flowering time, July to September. Collected in early spring, or when the leaf falls in autumn. *Preparation*.—Tincture of the fresh bark of the root, corresponding in alcoholic strength with proof spirit, prepared in, and imported from, North America. Process I. *Dispensing forms*.— ϕ and upwards, tincture, tincture-trituration, pilules, or globules. Tincture of the dry root. Am.H.P.—Tincture of the fresh root and its bark, Class III.

Barosma Crenulata. (Ad.) (Buchu.) N.O. Diosmeæ. Part employed, the leaves. *Preparation*.—Tincture with dilute alcohol (*Hale*). Proof spirit would be better, we think.

BARYTA ACETICA. (Baric Acetate, $\text{Ba}(\text{C}_2\text{H}_3\text{O}_2)_2, \text{H}_2\text{O}$) Acetate of Barium. "Prepared by dissolving carbonate of barium in dilute acetic acid, evaporating the solution on a water bath, and crystallizing the salt. *Characters and tests*.—Colourless, transparent, flat prisms, readily soluble in water, the solution giving an immediate white precipitate with a solution of sulphate of lime. When the salt itself is acted upon by sulphuric acid, acetic vapours are given off" (B.H.P.). *Preparation*.—Solution in distilled water for 1*æ*, using dilute alcohol for 1, and after that rectified spirit. *Dispensing forms*.—1*æ* and 1, solution only, 3*æ* and upwards; tincture, tincture-trituration, pilules, or globules. Am.H.P.—Solution as Class V. *a*; triturations as Class VII.

BARYTA CARBONICA. (Baric Carbonate, BaCO_3) *Syn.* Barytæ carbonas. Carbonate of Barium. "Prepared by precipitating a solution of pure chloride of barium with carbonate of ammonia, collecting the precipitate on a filter, washing carefully, and drying" (B.H.P.). Should be obtained pure from the operative chemist. *Preparation*.—Trituration. *Dispensing forms*.—1*æ* to 3, trituration

only ; 4 and upwards, tincture, tincture-trituration, pilules, or globules. Am.H.P.—Triturations as Class VII.

Baryta Caustica. (Ad.) Caustic, or pure Barytes. Am. H.P.—Trituration as Class VII.

Baryta Iodata. (Baric Iodide, BaI_2 .) *Syn.* Barii iodidum. May be obtained of the manufacturing chemists. *Preparation.*—Solution in distilled water for $1x$, using dilute alcohol for 1 and $3x$, and rectified spirit for 2 and upwards. Am.H.P.—Trituration.

BARYTA MURIATICA. (Baric Chloride, $\text{BaCl}_2 \cdot 2\text{H}_2\text{O}$.) *Syn.* Barii chloridum. Chloride of Barium. Prepared by recrystallizing the commercial salt. *Preparation.*—Solution in distilled water for $1x$, using dilute alcohol for 1, and after that rectified spirit. *Dispensing forms.*— $1x$ and 1, solution only ; $3x$ and upwards, tincture, tincture-trituration, pilules, or globules. Am.H.P.—Solution as Class V. a.; triturations, Class VII.

BELLADONNA. (*Atropa Belladonna*, *Linn.*) N.O. Solanaceæ. *Syn.* Solanum maniacum, S. furiosum. Deadly Nightshade, Common Dwale. The following information is taken from Dr. Hamilton's *Flora Homœopathica*:—*Atropa Belladonna* is a native of nearly the whole of Europe, more especially in the South. It is indigenous in Great Britain. Found in waste ground, more particularly on a calcareous soil. *Characters.*—A perennial plant, flowering in June. Root branched and spreading. The stem is herbaceous, upright, round, somewhat hairy, and reddish, 3 feet high. Leaves, sometimes alternate, more commonly in pairs, in which case, one leaf of each pair is for the most part less than the other ; ovate and acuminate. Flowers nearly an inch long, solitary, axillary, bell-shaped ; greenish towards the flower stalk externally, dingy purple towards the rim internally. Fruit a dark black, shining berry, and contains many kidney-shaped seeds. *Preparation.*— ϕ tincture, prepared from the fresh plant, collected when in full flower ; dilute alcohol. Process I. *Dispensing forms.*— ϕ and upwards, tincture, tincture-trituration, pilules, or globules. "Average loss of moisture, 87 per cent. ; in making the $1x$ attenuation it will therefore be necessary to use about $1\frac{1}{2}$ measure of the

mother tincture to 8½ measures of dilute alcohol" (B.H.P.).
Am.H.P.—Fresh plant tincture, Class I.

Bellis Perennis. N.O. Compositæ. The Daisy. *Preparation.*—Tincture of the whole plant, proof spirit. Average loss of moisture, 77 per cent. Used externally for bruises instead of arnica. Am.H.P.—Fresh plant tincture as Class I.

Benzinum Nitricum. (Ad.) (Nitro-benzol, $C_6H_5(NO_2)$.) Artificial Oil of Bitter Almonds, Nitro-benzine. May be obtained from the operative chemist. *Preparation.*—Solution in rectified spirit for 1x and upwards; pilules and globules. Am.H.P.—Solution as Class VI. a.

Benzoinum. (Ad.) (Benzoin.) A balsamic resin obtained from *Styrax Benzoin*, and probably from one or more other species of *Styrax*. For *characters* see B.P. Solubility about 1 in 5 of rectified spirit. *Preparation.*—Solution in rectified spirit, 1 in 10.

Berberinum. (Ad.) ($C_{20}H_{17}NO_4$) *Syn.* Berberia. Am.H.P.—Trituration.

Berberis Aquifolium. (Ad.) N.O. Berberidacæ. Habitat, coast range mountains of the United States. Used as a tonic for syphilis, scrofula, &c. Part employed, the root. *Preparations.*—Fluid extract, tincture.

BERBERIS VULGARIS. N.O. Berberidacæ. *Syn.* *Berberis dumetorum*, *Spina acida*. Common Barberry, Pipperidge Bush. Indigenous in Great Britain and other parts of Europe. The genera, in Europe, Asia and America. Rare in South America. *Description.*—"A bushy shrub, from 3 to 6 feet high; in a cultivated state, often much higher. Flowers May and June. Branches alternate, flexible, angular, with a yellowish-brown bark. Leaves in tufts, from lateral buds, deciduous, stalked, somewhat inversely egg-shaped, more or less pointed, between serrated and fringed. Thorns at the base of each leaf-bud, three-cleft, spreading, sharp, channelled underneath. Clusters solitary, from the centre of each bud, stalked, simple, many-flowered, drooping, with red glands. Berries red, oblong, a little curved, very acid. Root bark, brown externally, very bitter. Parts used, the small branches of the roots, or the bark of the branches of the roots of moderate

size (the large roots being too fibrous)." *Flora Homœopathica*. Collect in spring, before flowering, or autumn, when the leaves are falling. *Preparation*.—Tincture, corresponding in alcoholic strength with proof spirit. Process I. *Dispensing forms*.— ϕ and upwards, tincture, tincture-trituration, pilules, or globules. Average loss of moisture, 42 per cent. Am.H.P.—Tincture from the freshly dried bark from the root, as Class IV.

Betonia Aquatica. See SCROPHULARIA AQUATICA.

Bismuthum Metallicum. (Ad.) (Bismuth, Bi.) Metallic Bismuth. Am.H.P.—Trituration.

Bismuthum Oxydatum. (Bismuthous Oxide, Bi_2O_3 .) *Syn.* Bismuthi oxidum. Oxide of Bismuth of the B.P. Prepared by boiling subnitrate of bismuth with solution of soda. B.P. dose, 5 to 15 grains. *Preparation*.—Trituration. Am.H.P.—The same.

BISMUTHUM SUB-NITRICUM. (Bismuthi Subnitrates, $\text{BiONO}_3 \cdot \text{H}_2\text{O}$.) Subnitrate of Bismuth of the B.P. *Syn.* Oxyhydrate of Bismuth. For preparation, characters and tests, see B.P. Insoluble in water. B.P. dose, 5 to 20 grains. *Homœopathic preparation*.—Trituration. *Dispensing forms*.—1 \times to 3, trituration only; 4 and upwards, tincture, tincture-trituration, pilules, or globules. Am.H.P.—Trituration.

Blatta Americana. (Ad.) (The great American Cockroach.) Am.H.P.—Trituration.

Boletus Laricis. See POLYPORUS OFFICINALIS.

Borax. (Sodic Pyroborate, Acid Borate of Sodium, $\text{Na}_2\text{B}_4\text{O}_7 \cdot 10\text{H}_2\text{O}$.) *Syn.* Sodæ Biboras. A native salt. Also prepared artificially by boiling together in proper proportions boric acid and carbonate of sodium. For characters and tests, see B.P. Solubility, 1 in 22 of water, 2 in 1 of boiling water; 2 ounces of borax are dissolved by 2 ounces of glycerine, and the solution measures only $3\frac{1}{2}$ ounces. By the aid of 1 of glycerine, 1 part of borax will dissolve in 12 of water (Squire). B.P. dose, 5 to 40 grains. *Preparations*.—Trituration; solution in distilled water, to which 5 per cent. of rectified spirit has been added for 1, dilute alcohol for 3 \times , rectified spirit for 2 and upwards. *Dispensing forms*.—1 \times to 3, trituration, or 1 and 3 \times , solu-

tion ; 2 and upwards, tincture, tincture-trituration, pilules, or globules. Am.H.P.—Solution as Class V. *b* ; trituration, Class VII.

Bovista. (*Lycoperdon bovista.*) N.O. Fungi. *Syn.* *Lycoperdon globosum*, *Bovista nigrescens*, *Fungus ovatus*. Puff-ball, Molly-puff, Bull-fist. Habitat, on dry meadows and downs in most parts of Europe. *Characters.*—Stemless ; a regular globe, with only two coats ; smooth, soft and yellowish-white when young, becoming yellow, and then brown ; filled with a white cottony substance, which becomes brown, and contains, when ripe, an immense quantity of extremely fine brown-black powder. Time for collecting, August and September. *Preparation.*—Trituration of the ripe powder. *Dispensing forms.*—1*x* to 3, trituration only ; 4 and upwards, tincture, tincture-trituration, pilules, or globules. Am.H.P.—Tincture, Class IV. ; triturations, Class VII.

Brachyglottis Repens. Puke-Puke. New Zealand. Produces symptoms of albuminuria and disturbances of the urinary organs ; used in Bright's disease with great success. Part employed, the leaves ? *Preparation.*— ϕ tincture. Am.H.P.—Tincture of fresh leaves and flowers as Class III.

Branca Ursina. N.O. Umbelliferae. *Syn.* *Heracleum sphondylium*. Cow-parsnip, Hogweed, Bear's Breech. *Preparation.*— ϕ tincture of the fresh root, pilules and globules ; tincture-trituration. Am..H.P.—Tincture of fresh plant, Class I.

Brayera Anthelmintica. (Ad.) N.O. Rosaceae. Kouso. Collected in Abyssinia. *Preparation.*—Tincture of the dried blossoms as imported. Am.H.P.—Tincture as Class IV.

BROMIUM. (Bromine, Br.). *Syn.* *Bromum*. A liquid non-metallic element obtained from sea-water, and from some saline springs ; it may be purified by re-distillation into a refrigerated receiver containing water, the distillation being performed at a gentle heat by means of a water bath. Solubility in water, 1 in 30 by weight. *Preparation.*—The 2*x* solution is made by dissolving 9 minims of bromine (equal to about 24 grains by weight) in 5 fluid

ounces of distilled water; 3*x* with dilute alcohol, and all above with rectified spirit. N.B.—Pure bromine should be kept under water in well-stoppered bottles, and the low attenuations should always be made fresh as required. *Dispensing forms.*—1 and 3*x*, solution only; 2 and upwards, tincture, pilules, or globules. Am.H.P.—Solution as Class V. *b*.

Brucea Antidysenterica. See ANGUSTURA SPURIA.

Brucinum. (Ad.) (Brucia, $C_{23}H_{26}N_2O_4$.) Obtained from the seeds of *Strychnos nux vomica*. Am.H.P.—Trituration.

BRYONIA ALBA. N.O. Cucurbitaceæ. *Syn.* Vitis alba, Bryonia vera. White Bryony, Wild Hops. Habitat—*B. alba*, common in Germany and France; *B. dioica*, common in England, in hedges and thickets. Flowers in June and July. *Characters.*—"Root a large, fleshy, succulent, branched root-stock, of yellowish-white colour, with circular wrinkles, having an acrid, bitter, disagreeable taste and peculiar odour; stems climbing to a great length, and, as well as the whole plant, rough with minute hairs; tendrils simple or branched, and spirally twisted; leaves more or less deeply divided into five or seven broad, angular and coarsely-toothed lobes, of which the middle one is the longest; calyx with five small teeth; corolla five-lobed; stamens combined into three, of which two are double and one single; style three-lobed, with capitate stigmas; fruit a globular berry, red or orange, when ripe, in the case of *B. dioica*, and black in that of *B. alba*. Care must be taken not to mistake the root of the *Tamus communis* for this, as has frequently happened. For security's sake the root should never be gathered without the stems attached, so that it may be identified. Time for collecting, before the plant flowers, and in October. N.B.—After much consideration, the two species of bryonia are recorded as officinal, since while it is no doubt true that Hahnemann used *Bryonia alba*, yet a large quantity of *B. dioica* has been prepared and used in this country, and the action is so similar to the *alba* that few, if any, practitioners can detect the difference. As the provings were made from the *Bryonia alba*, it is recommended that

the attenuations be made from it." B.H.P. *Preparation*.—Tincture of the fresh root corresponding in alcoholic strength with dilute alcohol. Process I. *Dispensing forms*.— ϕ and upwards, tincture, tincture-trituration, pilules, or globules. Average loss of moisture: in June 80 per cent.; in October, 71 per cent. Am.H.P.—Tincture of the fresh plant as Class I.

Bryonia Aquatica. See SCROPHULARIA AQUATICA.

Bryonia Liniment. (Ad.) Simple liniment, 7; strong tincture of bryonia, 1. Mix.

Buchu. See BAROSMA CRENULATA.

Bufo Vulgaris. (Rana Bufo.) The Common Toad. Part employed, the secretion from the cutaneous glands, obtained by irritating the animal. *Preparation*.—Tincture, proof spirit.

CACTUS GRANDIFLORUS. N.O. Cactaceae. *Syn.* *Cereus grandiflorus.* Night-blooming *Cereus.* Habitat, Mexico and West India Islands. *Characters*.—"Stems cylindrical, furnished with five or six slightly prominent ribs, beset with small radiating spines; flowers large and white, opening in the evening and withering before sunrise, having a powerful odour of benzoic acid and vanilla. N.B.—Dr. Rubini, of Naples, who first proved this plant, collected it in the month of July, at which time it blooms in Naples, where it thrives well in the open air. It is suggested that a tincture prepared in its native country be procured, if possible." B.H.P. *Preparation*.—Tincture of the youngest and tenderest stems, with the flowers, collected in summer; 1 in 20 corresponding in alcoholic strength with proof spirit. Process II. *Dispensing forms*.— ϕ and upwards, tincture, tincture-trituration, pilules, or globules. Average loss of moisture of West Indian plant, 85 per cent. Am.H.P.—Tincture of the same, Class III.

Cadmium Sulphuratum. (Cadmic Sulphide, CdS.) Obtained by passing sulphuretted hydrogen gas through a solution of the sulphate. *Preparation*.—Trituration.

Cadmium Sulphuricum. (Cadmic Sulphate,

- $\text{CdSO}_4 \cdot 4\text{H}_2\text{O}$.) *Syn.* Cadmii sulphas. *Preparation.*—Solution in distilled water for 1x and 1, using dilute alcohol for 3x, and rectified spirit for 2 and upwards. Am.H.P.—Trituration.
- Caffein.** (Ad.) ($\text{C}_8\text{H}_{10}\text{N}_4\text{O}_2 \cdot \text{H}_2\text{O}$.) Caffein. An alkaloid contained in the coffee bean. Is the same as theine, and has been obtained also from tea, guarana, Paraguay tea. For *Characters and Tests*, see B.P. Solubility, 1 in 80 of water; in rectified spirit, 1 in 40; in chloroform, 1 in 7, B.P. dose, 1 to 5 grains. *Preparation.*—Trituration.
- Caffein Bromohydrate.** (Ad.) (Bromohydrate of Caffein.) *Preparation.*—Trituration.
- Caffein Citrate.** (Ad.) (Citrate of Caffein.) *Preparation.*—Trituration.
- Cainca.** N.O. Rubiaceæ. An undetermined species of chiococca, brought originally from Brazil. *Preparation.*— ϕ tincture of the root, pilules and globules; tincture-trituration. Am.H.P.—Tincture from dried root bark, Class IV.
- Cajuputum.** N.O. Myrtaceæ. Oleum Cajuputi. Oil of Cajuput. The oil distilled from the leaves of *Melaleuca minor*. *Preparation.*—Solution in rectified spirit for 1x and upwards, pilules and globules.
- Caladium Seguinum.** N.O. Araceæ. *Syn.* Arum seguinum, Dieffenbachia seguina. Poisonous American Arum, Dumb Cane. Habitat, West Indies and South America, growing on the wet prairies in the neighbourhood of Paramaribo. *Preparation.*—Tincture, corresponding in alcoholic strength with proof spirit. Process I. Imported from America. *Dispensing forms.*— ϕ and upwards, tincture, tincture-trituration, pilules, or globules. Am.H.P.—Tincture of fresh root, Class III.
- CALCAREA ACETICA.** (Calcic Acetate, $\text{Ca}_2\text{C}_2\text{H}_3\text{O}_2$.) Impure Acetate of Lime. "Made by saturating dilute acetic acid (B.P.) with oyster-shells (previously boiled in water for an hour, cleaned, dried, and crushed), heating up to the boiling-point, and continuing the process until the acid is quite saturated; then filter and reduce to one-fifth by evaporation: allow to stand for a time, to throw down its brownish mucilaginous deposit, when clear mix

with equal bulk of proof spirit and again filter" (B.H.P.).
Preparation.—The above contains about 10 per cent. of acetate of lime, hence may be considered 1*x*. Proof spirit should be used for the 1 attenuation, 20 O.P. spirit for 3*x*, and rectified spirit for 2 and upwards. *Dispensing forms.*—1*x* and 1, solution as above; 3*x* and upwards, tincture, pilules, or globules.

Calcareæ Arsenicæ. (Tricalcic Diarsenate, $\text{Ca}_3\text{As}_2\text{O}_8$.)
Syn. Calcii arsenias. A light, white, amorphous powder, insoluble in water, and may be obtained from the operative chemists. *Preparation.*—Trituration. Am.H.P.—The same.

CALCAREÆ CARBONICÆ. (Calcic Carbonate, CaCO_3 .)
 Impure Carbonate of Lime. Made by selecting a tolerably thick, well-cleaned oyster shell, and taking from it the snow-white portion which exists between the inner and outer surface, pulverize, place on a calico filter, wash with distilled water, and dry on a water bath. *Preparation.*—Trituration. *Dispensing forms.*—1*x* to 3, trituration only; 4, dilute tincture only; 5 and upwards, tincture, pilules or globules. Am.H.P.—The same.

CALCAREÆ CAUSTICÆ. (Calcic Hydrate, CaH_2O_2 .)
 Slaked Lime. "Prepared by burning Carrara marble in a covered crucible until a small portion withdrawn from the centre of the crucible, when it has cooled, no longer effervesces when dropped into hydrochloric acid; when cold the whole is placed in a porcelain capsule, and slaked by the addition of half its weight of distilled water" (B.H.P.). Solubility, about 1 in 900 of water. *Preparation.*—"A saccharated solution containing about 1 grain of lime (CaO) in 100 minims, forming the 1 attenuation, should be prepared from the freshly slaked lime as follows: Triturate 1 ounce of the slaked product with 2 ounces of refined sugar, place the mixture in a bottle, and add to it 1 pint of distilled water; cork the bottle, and set it aside for a few hours, shaking frequently; separate the clear solution by means of a glass syphon, and add distilled water to increase its bulk by one-half; preserve it in a well-stoppered and capped bottle" (B.H.P.). This is the Liq. Calcis Saccharatus of the B.P., but made with the H.P.

special slaked lime. Distilled water to which 5 per cent. of rectified spirit has been added is used for 3*x*, dilute alcohol for 2, and rectified spirit for 5*x* and upwards. *Dispensing forms*.—1 to 2, solution only; 5*x* and upwards, tincture, pilules, or globules.

Calcareæ Chloratæ. (Chlorinated Lime, CaOCl_2 .) *Syn.* Calx chlorata, Calx chlorinata, Calcareæ hypochlorosa. Bleaching Powder. For characters and tests *see* B.P. *Preparation*.—Solution in distilled water, made by macerating 1 part of the powder in 10 of the water for 3 or 4 hours, with occasional shaking. This constitutes the 1*x* attenuation, which should be kept in a stoppered bottle. Distilled water to which 5 per cent. of rectified spirit has been added is used for 1, dilute alcohol for 3*x*, and rectified spirit for all above. Am.H.P.—Solution as Class V. *a*.

Calcareæ Fluoratæ. (Calcic, or Calcium Fluoride, CaF_2 .) *Syn.* Calcii fluoridum. Fluor Spar. *Preparation*.—Trituration.

Calcareæ Hypophosphorosa. (Calcic, or Calcium Hypophosphite, $\text{Ca}_2\text{PH}_2\text{O}_3$.) *Syn.* Calcii hypophosphis. Hypophosphite of Lime. Solubility, 1 in 8 of water. B.P. dose, 5 to 10 grains in water. *Homœopathic preparations*.—Trituration; solution in distilled water for 1*x*, using distilled water to which 5 per cent. of rectified spirit has been added for 1, dilute alcohol for 3*x*, and rectified spirit for all above. Am.H.P.—Trituration.

Calcareæ Iodatæ. (Calcic Iodide, CaI_2 .) *Syn.* Calcii iodidum. Deliquescent, and freely soluble in water. *Preparation*.—Solution in distilled water for 1*x*, using dilute alcohol for 1, and rectified spirit for all above. Am.H.P.—Trituration.

Calcareæ Muriaticæ. (Calcic, or Calcium Chloride, $\text{CaCl}_2\text{H}_2\text{O}$.) *Syn.* Calcii chloridum, Chloride of Calcium. For characters and tests *see* B.P. Solubility, 1 in 2 of water, 1 in 4 of rectified spirit. B.P. dose, 3 to 10 grains. *Homœopathic preparation*.—Solution in distilled water for 1*x*, using dilute alcohol for 1, and after that rectified spirit. Am.H.P.—Solution as Class V. *a*.

Calcareæ Oxalicæ. (Ad.) (Calcium Oxalate, CaOC_2O_3 .) Oxalate of Lime. Am.H.P.—Trituration.

CALCAREA PHOSPHORICA. (Tricalcic Phosphate, $\text{Ca}_3\text{2PO}_4$.) *Syn.* Calcis phosphas, Calcii phosphas, Phosphate of Calcium. Phosphate of Lime. "The preparation used in the earlier provings was made by precipitation from lime water, by adding phosphoric acid drop by drop, so as to avoid re-dissolving the precipitate, and forming the superphosphate. The following is, however, a more practical method of preparing it:—Take of chloride of calcium, 3 ounces; phosphate of soda, $2\frac{1}{2}$ ounces; stronger solution of ammonia, 6 fluid drachms; distilled water, a sufficiency. Dissolve the chloride of calcium in 10 fluid ounces of distilled water, filter, and to this add the ammonia and the phosphate of soda, previously dissolved in $1\frac{1}{2}$ pint of distilled water and filtered. Collect the precipitate on a calico filter, and wash it with hot distilled water until the filtrate gives no precipitate with oxalate of ammonia. Finally, dry on a water-bath" (B.H.P.). Characters and tests *see* B.P. Insoluble in water. B.P. dose, 10 to 20 grains. *Preparation.*—Trituration. *Dispensing forms.*—1x to 3, trituration only; 4 and upwards, tincture, tincture-trituration, pilules, or globules. Am.H.P.—The same.

Calcarea Sulphurica. (Calcic, or Calcium Sulphate, $\text{CaSO}_4 \cdot 2\text{H}_2\text{O}$.) Gypsum, Sulphate of Lime, Plaster of Paris. The commercial salt washed with distilled water and dried on a water bath. Sparingly soluble in water. *Preparation.*—Trituration. Am.H.P.—The same.

CALENDULA OFFICINALIS. N.O. Compositæ. *Syn.* Caltha officinalis, Solseginum aureum, Verrucaria. Marigold. A well-known garden annual. Habitat, France, and in cultivated ground over the greater part of Europe. *Preparation.*—Tincture of the leaves and flowers collected in summer, corresponding in alcoholic strength with dilute alcohol. Process I. *Dispensing forms.*— ϕ and upwards, tincture, tincture-trituration, pilules, or globules. Average loss of moisture, 86 per cent. Used chiefly as an external remedy for cuts and wounds. Glycerole of Calendula:—Tincture Calendula, 1 part; glycerine, 7 parts. Am.H.P.—Tincture of the fresh leaves at the top of the plant with the blossoms and buds, Class I.

Calendula Cerate. Calendula cerate is usually made by

adding to the simple cerate of the B.H.P., while warm, tincture of calendula in the proportion of 1 drachm to each ounce, and stir until cold. A better and more efficacious kind can be prepared as follows : Take of the dried petals, 1 lb., and sprinkle well with cold water ; let them remain in a heap for two hours, until they get thoroughly damp ; melt 4 lbs. of purified lard in a water bath, and add the damp calendula, allowing the whole to simmer for four hours, and strain. Excellent for wounds, broken chilblains, &c.

Calendula Jelly, or Calendula and Glycerine Jelly. Gelatine, 1 oz. ; glycerine, 8 ; tincture of calendula, 4 ozs. ; water, a sufficiency. Dissolve the gelatine in 10 ozs. of the water, with a gentle heat, add the glycerine and calendula, and make the whole up to 30 ozs., and pour into bottles when warm. A good preparation for chapped hands.

Calendula Liniment. Tinct. calendula, 1 ; soap liniment (B.H.P.), 7. Mix.

Calotropis Gigantea. N.O. Asclepiadaceæ. *Syn.* Calotropis Madarii. Madar, or Mudar. An East Indian plant. *Preparations.*—Tincture of the bark, proof spirit ; trituration.

Caltha Palustris. (Ad.) N.O. Ranunculaceæ. *Syn.* Caltha arctica. Cowslip, Marsh Marigold. Am.H.P.—Tincture of the fresh plant, Class I.

CAMPHOR. ($C_{10}H_{16}O$) N.O. Lauraceæ. *Syn.* Laurus camphora. Part employed, the concrete volatile oil obtained from the wood of Camphora officinarum, imported in a crude state, and purified by sublimation. N.B.—The strength of solutions used in cholera are as follows : Hahnemann suggested 1 in 12 of rectified spirit ; Dr. Quinn used 1 in 6 ; Dr. Rubini, a saturated solution containing nearly 50 per cent. B.P. dose, 1 to 10 grains. Solubility, 1 in 900 of water ; 1 in $1\frac{1}{4}$ of rectified spirit, or by weight 1 in 1 ; 4 in 1 of chloroform. *Preparation.*—Solution in rectified spirit. "As many practitioners use the saturated solution, which contains nearly 50 per cent., it is admitted as an officinal preparation, but must be designated as Tinctura Camphoræ saturata (Tinct. Camph. S.) Should tinct. camph. ϕ be inadvertently ordered, the satu-

rated solution should be given, as that would most probably be intended" (B.H.P.). *Dispensing forms.*—Tinct. Camph. S. and 1x and upwards, tincture, pilules, or globules. Am.H.P.—Solution in alcohol as Class VI. a.

Camphor Pilules. (Ad.) Usually pilules about the size of a pea, well saturated with the spirits of camphor.

Camphora Monobromata. (Monobrominated Camphor, $C_{10}H_{15}BrO$.) May be obtained from the operative chemists. *Preparation.*—Trituration; solution in rectified spirit. Given in doses of 2 to 5 grains.

Cancer Astacus. *Syn.* *Astacus fluviatilis*, *Cancer fluviatilis*. Common Craw-fish, Cray-fish. Parts employed, the live crustacean. *Preparation.*—Tincture, prepared as follows:—"Wash the animals in distilled water, dry them with a cloth, weigh them, bruise to a pulp, and add to each ounce by weight 4 fluid ounces of rectified spirit; triturate the mass with the spirit, and then transfer it to a wide-mouthed bottle and macerate for eight days, shaking the bottle twice daily. Finally filter" (B.H.P.). Am.H.P.—Tincture with twice its weight of alcohol; dilute as Class I.

Canchalagua. (Ad.) N.O. Gentianaceæ. Centaury of Chili. Habitat, California. Am.H.P.—Tincture of whole plant, Class IV.

CANNABIS. (*Cannabis Sativa*.) N.O. Cannabinaceæ. Hemp. Habitat, India and Persia. Cultivated in Russia, France, and Italy. Flowering time, early autumn. Part employed, the male and female flowering tops of the cultivated plant. Time for collecting, when in flower. *Characters.*—"Stem 6 to 8 feet high; leaves petioled, stipulate, digitate, opposite; leaflets five to seven, lanceolate; flowers, male, in small loose racemes at the ends of the stem and branches; female, axillary, solitary, very small." *Preparation.*—Tincture, corresponding in alcoholic strength with proof spirit. Process I. *Dispensing forms.*— ϕ and upwards, tincture, tincture-trituration, pilules, or globules. Average loss of moisture, 63 per cent. Am.H.P.—Tincture of the fresh blooming herb tops as Class III.

CANNABIS INDICA. N.O. Cannabinaceæ. Indian Hemp, Gunjah, Hashish. Part employed, Ext. Cannab. Ind. (B.P.). *Preparation.*— ϕ tincture, using rectified spirit, 1 in 10.

Dispensing forms.— ϕ and upwards, tincture, pilules or globules; tincture-trituration. N.B.—The resinous exudation removed from the leaves, slender stems, and flowers, is called *churrus*. It is collected in India, Herat, and Persia, and is employed for its intoxicating effects in the East. This would make an excellent tincture, if procurable. The imported Gunjah (dried hemp plant) yields to alcohol about 20 per cent. of resinous extract, composed of *churrus* and chlorophyll. Its active ingredient is cannabin. B.P. dose of the extract, $\frac{1}{4}$ to 1 grain. Am.H.P.—Tincture of the dried herb tops, Class IV.

Canna Glauca. (Ad.) N.O. Canniaceæ. Imbiri. Native of the West Indies. Am.H.P.—Tincture of the fresh leaves as Class III.

CANTHARIS. (Cantharis Vesicatoria.) *Syn.* Melœ vesicatorius, Lytta vesicatoria. Spanish Fly. Parts employed, the entire dried beetle. *Preparation.*—Tincture, using proof spirit. Process I. *Dispensing forms.*— ϕ and upwards, tincture, tincture-trituration, pilules, or globules. Am.H.P.—Tincture as Class IV.; trituration.

CAPSICUM. (Capsicum Annuum.) N.O. Solanaceæ. *Syn.* Piper Indicum vulgatissimum. Capsicum. Habitat, East and West Indies, and South America. Parts employed, the dry capsules and seeds, as imported. *Characters.*—“Flattened pods from 2 to 3 inches long, more or less shrivelled, smooth, shining, varying in colour from a light reddish-brown to a dark brown; usually with the calyx and stalk attached; with two or three cells containing dry, loose pulp, and numerous flat, kidney-shaped, bluff-coloured seeds.” N.B.—“Care must be taken to avoid confusion of the above with the smaller pods sold under the same name, and as chillies—a name applied to two or three species” (B.H.P.). *Preparation.*—Tincture, using rectified spirit. Process I. *Dispensing forms.*— ϕ and upwards, tincture, pilules, or globules. Am.H.P.—Tincture as Class IV.

Carbo. *Syn.* Carboneum. Lamp-black. The product obtained from burning coal-oil in a lamp. *Preparation.*—Trituration. Am.H.P.—The same.

CARBO ANIMALIS. (Animal Charcoal.) “Hahnemann

used that which is obtained by placing a piece of ox-hide leather on red-hot coals, and when it ceases to burn with a flame, the red-hot mass is lifted off and extinguished by pressing between two flat stones. Seeing that one ox-hide is not likely to differ materially from another, this mode ensures a uniform preparation, although not pure carbon" (B.H.P.). *Preparation*.—Trituration. *Dispensing forms*.—1x to 3, trituration only; 4 and upwards, tincture, tincture-trituration, pilules, or globules. Am.H.P.—The same.

Carbo Sublimatus. (Ad.) Recommended by Dr. Proctor, in the *British Quarterly Journal of Homœopathy*, as a substitute for Carbo Vegetabilis. Camphor (selected as being the purest form of hydrocarbon available) dissolved in pure spirit, is burned in a spirit-lamp, and the soot collected on a clean earthen plate. The impure carbon thus obtained is submitted to a red heat in a porcelain crucible, thus driving off the impurities in the form of yellowish vapour. The powder left behind is a fine glossy black, inodorous, tasteless, and extremely light and pulverulent. *Preparation*.—Trituration.

CARBO VEGETABILIS. (Vegetable Charcoal.) "Select a piece of charcoal, brittle, of a fine black colour, and retaining the form of the wood from which it has been prepared, and which on being ignited does not emit smoke or unpleasant smell" (B.H.P.). Hahnemann used charcoal made from birch wood. *Preparation*.—Trituration. *Dispensing forms*.—1x to 3, trituration only; 4 and upwards, tincture, tincture-trituration, pilules, or globules. Am.H.P.—The same, using beech or birch charcoal.

Carduus Benedictus. N.O. Compositæ. *Syn.* Centaurea benedicta, Cnicus benedictus. The Blessed Thistle. Habitat, Southern Europe. Part employed, the leaves. *Preparation*.—φ tincture. Am.H.P.—Tincture of fresh herb, Class III.

Carduus Mariæ. N.O. Compositæ. *Syn.* Carduus Marianus. Milk Thistle, St. Mary's Thistle. Habitat, Southern Europe; rare, and probably only introduced into Britain. Parts employed, equal parts of the root and seed, with the hull on. *Preparation*.—φ tincture, dilute alcohol. Am.H.P.

—Tincture of the ripe whole seed, 1 to 2 by weight, using dilute alcohol.

Carya Alba. (Ad.) N.O. Juglandaceæ. Shag-bark, Shell-bark, Hickory Nut. Indigenous to North America. Am.H.P.—Tincture as Class IV.

Cascarilla. (Croton Eluteria.) N.O. Euphorbiaceæ. Habitat, the Bahama Islands. Part employed, the bark as imported. *Preparations.*— ϕ tincture, using proof spirit; ϕ and upwards, tincture, pilules, &c.; tincture-trituration. Am.H.P.—Tincture, Class IV.

Castanea Vesca. (Ad.) N.O. Corylaceæ. Common Edible Chestnut. Recommended for whooping-cough. Am.H.P.—Tincture of the fresh leaves, Class III.

CASTOREUM. (Castor Fiber.) The Beaver. Castor. Imported from the Hudson's Bay Territory. We employ the secretion in the dried preputial follicles. *Characters.*—"Follicles in pairs, about 3 inches long, fig-shaped, firm, and heavy, brown or greyish-black; containing a dry resinous reddish-brown or brown highly odorous secretion, in great part soluble in rectified spirit, and in ether" (B.P., 1867). *Homœopathic preparation.*—Tincture, using rectified spirit. Process III. *Dispensing forms.*— ϕ and upwards, tincture, tincture-trituration, pilules, or globules. Am.H.P.—Trituration; tincture as Class IV.

CAULOPHYLLUM. (Caulophyllum thalictroides.) N.O. Berberidaceæ. *Syn.* Leontice thalictroides. Blue Cohosh, Squaw-root. Habitat, woods, Canada to N. Carolina and Kentucky. Flowers in April. Time for collecting, early in the season, when growth begins. *Preparation.*—Tincture of the root, corresponding in alcoholic strength with proof spirit. Process I. N.B.—As the plant is not indigenous to this country, the tincture imported from North America must be used. *Dispensing forms.*— ϕ and upwards, tincture, tincture-trituration, pilules, or globules. *Not official.*—Tincture of the dry root. Am.H.P.—Tincture of the fresh root, Class III.

CAUSTICUM. This is a preparation peculiar to homœopathy, and hence must be prepared exactly according to Hahnemann's directions, which are as follows:—"Take a piece of recently burnt lime, weighing about 2 pounds;

immerse it for a minute in a vessel full of distilled water, and then lay it in a dry cup, where it soon becomes pulverized, giving out much heat and a peculiar odour, called the vapour of lime. Of this fine powder you take 2 ounces, and place it in the mortar, which had been previously warmed, and then mix with a solution of 2 ounces of the bisulphate of potash in 2 ounces of boiling hot water, the potash before being dissolved having been exposed to a red heat, melted, cooled again, and then pulverized. This thickish preparation is inserted into a small glass retort, to the open end of which the receiver, which ought to be dipped in water to half its height, is fastened by means of a wet bladder. The liquid is distilled over by gradually approaching a coal fire to the retort, and until the preparation is perfectly dry. The liquid in the receiver is about $1\frac{1}{2}$ ounce, as clear as water, and containing the causticum in a concentrated form, which smells like the lye obtained from potash, and has an astringent and burning taste on the back part of the tongue. Its freezing point is below that of water; it promotes the putrefaction of animal substances which are placed in it; with the salts of baryta it gives no trace of sulphuric acid, nor any trace of lime-earth with the oxalate of ammonia." In order to preserve this solution, it is necessary to add 5 per cent. of rectified spirit. *Tests*.—Odour peculiar, not purely ammoniacal. It yields a red precipitate with Nessler's solution. *Preparation*.—Attenuations should be made with rectified spirit. What is called mother tincture, however, in this case is of unknown strength. *Dispensing forms*.— ϕ , solution only; $1x$ and upwards, tincture, pilules, or globules. Am.H.P.—The same.

Ceanothus Americanus. N.O. Rhamnaceæ. New Jersey Tea. Habitat, United States. *Preparation*.—Tincture of the leaves. Am.H.P.—Tincture of the fresh leaves, Class III.

CEDRON. (Simaba Cedron.) N.O. Simarubaceæ. Rattlesnake Beans. Habitat, New Granada and Central America. *Characters*.—"Dried fruit light, of a yellowish ash-colour, flattish ovate, with one edge convex, the other nearly straight, the convex outline terminating at each end in an

obtuse point, of which that at the apex is most prominent ; about 2 inches long, and 16 lines in its greatest breadth. Within it is the seed, loose and movable, about $1\frac{1}{2}$ inch long, 10 lines broad, and $\frac{1}{2}$ inch thick, convex on one side, flat or slightly concave on the other, and presenting an oval scar near one extremity of the flat surface. It is hard and compact, but may be readily cut with a knife ; inodorous, but of a pure and intensely bitter taste, not unlike that of quassia " (B.H.P.) *Preparation*.—Tincture of the seed, using rectified spirit, Process I. *Dispensing forms*.— ϕ and upwards, tincture, tincture-trituration, pilules, or globules. Am.H.P.—Tincture, Class IV.

Cepa. See ALLIUM CEPA.

Cera Alba. White Wax of the B.P. Yellow wax bleached by exposure to moisture, air and light.

Cerasus Virginiana. (Ad.) N.O. Rosaceæ. In Hale's "New Remedies" we find this described as the same as *Prunus Virginiana*, a red, wild cherry, indigenous to the United States, known as "choke-cherry," or "choke-berry." This is correct according to Linnæus. In the U.S. Pharmacopœia *Prunus Virginiana*, or wild, black cherry, is described as *Cerasus serotina* of De Candolle. The part employed is the inner bark. *Preparations*.—Infusion in cold water and tincture, using dilute alcohol. The choke cherry, or red, wild cherry, should be used. Am.H.P.—Tincture of the fresh bark, Class IV.

Cerium Oxalicum. (Ad.) (Oxalate of Cerium, $Ce_2(C_2O_4)_3 \cdot 9H_2O$.) *Syn.* Cerii oxalas. A white, insoluble powder. Used to stop sickness. B.P. dose, 1 to 2 grains. *Preparation*.—Trituration.

Cetaceum. Spermaceti of the B.P.

CHAMOMILLA. (*Matricaria Chamomilla*.) N.O. Compositæ. *Syn.* Chamæmelum vulgare, Chamomilla nostras, Leucanthemum. Wild Chamomile, German Chamomile, Corn Feverfew. Habitat, most parts of Europe, in corn fields, waste grounds and roadsides. Flowers from May to August. Collected when in flower. *Characters*.—"An erect, branching annual ; leaves twice or thrice pinnate, with short but very narrow linear segments ; flower heads rather large, on terminal peduncles ; involucre bracts all

nearly of the same length, with scarious edges ; ray-florets white ; receptacle naked, almost perfectly cylindrical when fully developed, hollow. Very similar to the well-known fetid chamomile (*Anthemis cotula*), but distinguished from it by having no scales on the receptacle" (B.H.P.). *Preparation*.—Tincture of the whole plant, corresponding in alcoholic strength with proof spirit, Process I. *Dispensing forms*.— ϕ and upwards, tincture, tincture-trituration, pilules, or globules. Average loss of moisture, 75 per cent. Am.H.P.—Tincture as Class I.

CHELIDONIUM MAJUS. N.O. Papaveraceæ. *Syn.*

Papaver corniculatum luteum. Common Celandine. Habitat, in waste places, especially near towns and villages, all over Europe, America, and the corresponding parts of Asia. Flowers May and June. Parts employed, the entire fresh plant, including the root. *Characters*.—"About 2 feet high, slightly hairy, brittle, full of yellow fetid juice ; leaves pinnate, with about five decurrent segments which are broadly ovate, lobed, and crenated, sometimes jagged ; flowers in long-stalked umbels, yellow, rather small ; sepals glabrous ; pod long, somewhat turgid" (B.H.P.). Time for collecting, at the beginning of flowering. *Preparation*.—Tincture corresponding in alcoholic strength with dilute alcohol, Process I. A trituration of the dried plant is suggested. *Dispensing forms*.— ϕ and upwards, tincture, tincture-trituration, pilules, or globules. Average loss of moisture, 86 per cent. Am.H.P.—Tincture of the fresh root as Class I.

Chelone Glabra. N.O. Scrophulariaceæ. Balmony, Snake-head, Turtle-head. Indigenous to the United States.

Preparation.—Tincture of the whole plant. Am.H.P.—Tincture of the fresh plant, Class III.

Chenopodium Anthelminticum. (Ad.) N.O. Chenopodiaceæ. *Syn.* Cina Americana. Jerusalem Oak, Stinking Weed, Worm-seed. Indigenous to America. Am.H.P.—Tincture of the fresh herb in flower as Class III.

Chenopodium Glaucum. (Ad.) N.O. Chenopodiaceæ. Oak-leaved Goosefoot. Indigenous to Europe. Tincture. Am.H.P.—Tincture of the fresh herb, Class III.

CHIMAPHILA UMBELLATA. N.O. Pyrolaceæ. *Syn.*

C. corymbosa, *Pyrola umbellata*. Prince's Pine, Pipsissewa, American Wintergreen. Habitat, northern latitudes of America, Europe and Asia. Parts employed, the root and leaves. Tincture. Am.H.P.—Tincture of the fresh plant in flower as Class III.

CHINA. (*Cinchona Calisaya*.) N.O. Rubiaceæ. *Syn.* *Cinchona flava*, *C. officinalis*. Peruvian Bark, Yellow Cinchona Bark of the B.P. *Characters and tests.*—"In flat pieces, uncoated or deprived of the periderm, rarely in coated quills, from 6 to 18 inches long, 1 to 3 inches wide, and 2 to 4 lines thick, compact and heavy; outer surface brown, marked by broad, shallow, irregular longitudinal depressions; inner surface tawny-yellow, fibrous; transverse fracture shortly and finely fibrous. Powder cinnamon-brown, somewhat aromatic, persistently bitter" (B.P., 1867). The yellow bark is now only used in the B.P. for obtaining the salts of quinine and cinchonine, the Red Cinchona Bark having taken its place for preparing the decoction, extract, infusion, tincture, &c. *Preparation.*—Tincture of the dried bark, using 20 O.P. spirit, Process I. *Dispensing forms.*— ϕ and upwards, tincture, tincture-trituration, pilules, or globules. Am.H.P.—Same, Class IV.; trituration of the powdered bark.

Chininum. (Quinine, Quinia, $C_{20}H_{24}N_2O_2$.) Pure Quinine. Prepared by precipitating sulphate of quinine with solution of potash, collecting the precipitate, washing it thoroughly with distilled water, then drying it, dissolving it in rectified spirit, and slowly evaporating the filtered solution. *Preparation.*—Trituration. Am.H.P.—Trituration.

Chininum Arsenicum. Triquinia Arsenate ($C_{20}H_{24}N_2O_2$), $H_3AsO_4 \cdot 2H_2O$.) *Syn.* Quiniæ arsenias. Arseniate of Quinine. Prepared by directly combining pure quinine with arsenic acid. Given in doses of $\frac{1}{10}$ grain. *Preparations.*—Trituration; solution in 20 O.P. spirit for 1, using 20 O.P. spirit for 3*z*, and rectified spirit for all above. Am.H.P.—Trituration.

CHININUM MURIATICUM. (Quinine, or Quinia Hydrochloride, $C_{20}H_{24}N_2O_2 \cdot HCl \cdot 2H_2O$.) *Syn.* Quiniæ hydrochloras. Hydrochlorate of Quinine. Obtained from the same sources and by the same process as Sulphate of Qui-

nine, the separated alkaloid being neutralised by hydrochloric acid. This has several advantages over the sulphate, being more soluble and more stable, and not likely to become flocculent on keeping. *Characters and tests*.—See B.P. Soluble in about 34 parts of water without the aid of any acid. Freely soluble in spirit. B.P. dose, 1 to 10 grains. *Preparations*.—Solution in 20 O.P. spirit for 1x, after which rectified spirit may be used; trituration. *Dispensing forms*.—1x and upwards, tincture, tincture-trituration, pilules, or globules; or 1x to 3, trituration. Am.H.P.—Trituration.

Chininum Salicylicum. (Ad.) (Salicylate of Quinine.)

Syn. Quinia salicylas. Sparingly soluble in water, about 1 in 630; 1 in 24 rectified spirit; 1 in 60 proof spirit.

Preparation.—Trituration.

CHININUM SULPHURICUM. (Quinine, or Quinia

Sulphate, $(C_{20}H_{24}N_2O_2)_2H_2SO_4 \cdot 15H_2O$.) *Syn.* Quiniæ sulphas. Sulphate of Quinine. The sulphate of an alkaloid obtained from Cinchona calisaya (*Wedd.*) and other species of Peruvian bark. For characters and tests see B.P. Solubility, 1 in 700 or 800 of water, 1 in 65 of rectified spirit. B.P. dose, 1 to 10 grains. *Homœopathic preparations*.—Trituration for 1x, unless sulphuric acid is added in excess. An aqueous solution of 1 in 15 can be made by adding a few drops of dilute sulphuric acid. The salt is sufficiently soluble in 20 O.P. spirit to allow of a 1 centesimal solution being made, and from this the higher attenuations should be prepared with rectified spirit. *Dispensing forms*.—Below 1, trituration or solution only; 1 and upwards, tincture, tincture-trituration, pilules, or globules. Am.H.P.—Trituration.

Chionanthus Virginica. (Ad.) N.O. Oleaceæ. Old Man's Beard, Fringe Tree. This is a singular-looking shrub, growing from Pennsylvania to Georgia, on river banks and sandy places. Part employed, the bark. *Preparation*.—Tincture, rectified spirit. Am.H.P.—Tincture of fresh bark, Class III.

Chloral Hydras. See CHLORALUM HYDRATUM.

Chloralum Hydratum. (Chloral Hydrate, $C_2HCl_2O \cdot H_2O$.)

Syn. Chloral hydras, Hydræus Chloral. For preparation,

characters and tests *see* B.P. Soluble in less than its own weight of water or rectified spirit. B.P. dose, 5 to 30 grains. *Homœopathic preparations*.—Solution in distilled water to which 5 per cent. of rectified spirit has been added for 1x, using dilute alcohol for 1, and rectified spirit for all above; trituration. Am.H.P.—Solution as Class VI.

Chlorum. (Solution of Chlorine, Cl.) *Syn.* Liquor chlori. Chlorine gas dissolved in water. For preparation, characters and tests *see* B.P. *Preparation*.—1½ fluid drachm, diluted to one fluid ounce with distilled water, forms the 3x attenuation. N.B.—All solutions of chlorine should be frequently prepared.

CICUTA VIROSA. N.O. Umbelliferae. *Syn.* *Cicuta aquatica*, *Sium majus angustifolium*. Cowbane, Long-leaved Water Hemlock. Habitat, in wet ditches in Northern and Central Europe, Russian Asia, and North America. Very local in Britain. Flowers in summer. *Characters*.—"Root thick, white, fleshy, elongated, full of hairs, and hollow, containing a yellow juice, with a strong, disagreeable odour, and an acrid, caustic taste; stem hollow, somewhat branched, attaining 3 or 4 feet; leaves twice or thrice pinnate or ternate, with narrow-lanceolate, acute segments, 1 to 1½ inch long, bordered with a few unequal, acute teeth; general umbels of from ten to fifteen or even more rays; no general involucre, or only one or two small bracts; partial involucre of many subulate bracts, not quite so long as the pedicels; calyx teeth prominent above the ovary; petals white, obcordate; fruit short, laterally compressed, each carpel nearly globular, with five scarcely prominent broad flat ribs, and single vittas under the furrows" (B.H.P.). Time for collecting, at the beginning of flowering. N.B.—It should not be collected without the entire plant, since the leaves, stem, &c., are necessary for accurate identification. *Preparation*.—Tincture of the fresh root, corresponding in alcoholic strength with proof spirit, Process I. *Dispensing forms*.—φ and upwards, tincture, tincture-trituration, pilules, or globules. Am.H.P.—Tincture of the fresh root, Class I.

Cimicifuga. *See* ACTÆA.

CINA. (*Artemisia Maritima*.) N.O. Compositæ. Worm-seed. Santonica of the B.P. Parts employed, unexpanded flower-heads as imported. *Characters.*—See B.P. *Preparations.*—Tincture, using rectified spirit, Process I.; trituration. *Dispensing forms.*— ϕ and upwards, tincture, tincture-trituration, pilules, or globules; or 1æ to 3, trituration. Am.H.P.—Tincture of the same, Class IV.

Cinchona Succirubra. (Ad.) N.O. Rubiaceæ. Red Cinchona Bark of the B.P. *Preparation.*—Tincture 1 in 10 with proof spirit, pilules and globules.

Cinchoninum Sulphuricum. (Ap.) (Cinchonine, or Cinchonin Sulphate ($C_{20}H_{24}N_2O_3$), $H_2SO_4 \cdot 2H_2O$.) *Syn.* Cinchoninæ sulphas. Sulphate of Cinchonine of the B.P. *Preparation.*—Solution in 20 o.p. spirit, 1 in 10. B.P. dose, 1 to 10 grains. Am.H.P.—Trituration.

Cinnabar. See MERCURIUS SULPHURATUS RUBER.

Cinnamomum. (*Cinnamomum Zeylanicum*.) N.O. Lauraceæ. *Syn.* Laurus cinnamomum. Cinnamon. Part employed, the inner bark of shoots from the truncated stocks or stools as imported from Ceylon. *Preparation.*—Tincture, using rectified spirit, Process I. *Dispensing forms.*— ϕ and upwards, tincture, pilules, or globules. Am.H.P.—Tincture of same, Class IV.

Cistus Canadensis. N.O. Cistaceæ. *Syn.* Helianthemum Canadense, H. corymbosum, H. rosmarifolium, Lechea major. Rock Rose, Frostwort. Habitat, in dry, sandy soils, Canada to Florida. Flowers June to September; April in the Southern States. *Preparation.*—Tincture of the entire fresh plant when in flower and seed, corresponding in alcoholic strength with proof spirit, prepared in, and imported from, North America. *Dispensing forms.*— ϕ and upwards, tincture, tincture-trituration, pilules, or globules. Am.H.P.—Tincture of the fresh plant when in flower, Class III.

Clematis Erecta. N.O. Ranunculaceæ. *Syn.* Flammula jovis. Upright Virgin's Bower. Habitat, South of France, Spain, Switzerland, &c. Flowers July and August. *Characters.*—"Stem 3 feet high, leafy, striated, herbaceous, greenish or reddish; leaves large, opposite; leaflets five to nine, pubescent underneath, petioled; flowers white, in

upright stiff terminal umbels; peduncles several times ternate; seeds dark brown, smooth, orbicular, much compressed; tails long, yellowish, plumose." Time for collecting, when beginning to flower. *Preparation*.—Tincture of the leaves and stems, using proof spirit, Process I. *Dispensing forms*.— ϕ and upwards, tincture, tincture-trituration, pilules, or globules. Am.H.P.—Tincture of the fresh leaves and stems as Class I.

Cobaltum. (Cobalt, Co.) The pure metal, obtained in a spongy form by reducing the chloride by hydrogen. Can be obtained pure from the operative chemists. *Preparation*.—Trituration. Am.H.P.—The same.

Coca. See ERYTHROXYLON COCA.

Coccionella Septempunctata. Common Lady-bird. Part employed, the whole insect, crushed when alive. *Preparation*.— ϕ tincture, with proof spirit 1 in 10. Am. H.P.—Tincture as Class IV.

COCCULUS. (Anamirta Cocculus.) N.O. Menispermaceæ. *Syn.* Coccus indicus, Menispermum cocculus. Part employed, the berries, imported from Malabar and Indian Archipelago. *Preparation*.—Tincture, using rectified spirit, Process I. *Dispensing forms*.— ϕ and upwards, tincture, tincture-trituration, pilules, or globules. Am.H.P.—Tincture, Class IV.

COCCUS CACTI. Cochineal. The dried female insect, Coccus Cacti, Linn., reared on Opuntia Cochinillifera, and other species of Opuntia. *Preparation*.— ϕ tincture of the entire female insect, dried, as imported, 1 in 20, using proof spirit, Process I.; trituration. *Dispensing forms*.—1x to 3, trituration; or ϕ and upwards, tincture, tincture-trituration, pilules, or globules. Am.H.P.—Tincture, Class IV.

Cochlearia. (Cochlearia Armoracia.) N.O. Crucifereæ. *Syn.* Armoracia rusticana. Horse-radish. *Preparation*.—Tincture of the root, proof spirit. Am.H.P.—Tincture of the fresh root as Class III.

Codeinum. (Codeine, or Codeia, of the B.P., $C_{15}H_{21}NO_3$, H_2O .) An alkaloid obtained from opium. Soluble 1 in 80 in water, ether, and alcohol. B.P. dose, $\frac{1}{4}$ to 2 grains. *Preparation*.—Solution in rectified spirit for 1x and upwards. Am.H.P.—Trituration.

COFFEA. (*Coffea Arabica*.) N.O. Rubiaceæ. *Syn.* *Jasminum Arabicum*. Coffee. Habitat, Arabia Felix and Ethiopia. Part employed, the seed, using the best Mocha coffee of the shops, unroasted. *Characters and tests.*—Pale green or straw coloured, and readily sinking in water. *Preparation.*—Tincture, rectified spirit, Process I. *Dispensing forms.*— ϕ and upwards, tincture, tincture-trituration, pilules, or globules. Am.H.P.—1 part of the best unroasted coffee beans is powdered in an iron mortar, moderately heated, and macerated eight days with 6 parts of strong alcohol, and then filtered. The residuum is then boiled down in a glass retort with 40 parts of distilled water, so far that the filtrate mixed with the alcoholic extract amounts to 10 parts by weight.

COLCHICUM. (*Colchicum Autumnale*.) N.O. Melanthaceæ. *Syn.* *C. anglicum*, *C. commune*. Meadow Saffron, Tuber-root, Naked Lady, Upstart. Habitat, moist meadows and pastures over the greater part of Europe; abundant in some parts of England and Ireland. Flowers in autumn. Part employed, the fresh corm or bulb. *Characters.*—See B.P. Should be collected in the spring, when the leaves are withered, and about the end of June or beginning of July. *Preparation.*—Tincture, corresponding in alcoholic strength with proof spirit, Process II. *Dispensing forms.*— ϕ and upwards, tincture, tincture-trituration, pilules, or globules. Average loss of moisture, 69 per cent. *Additional preparations.*—Trituration of the dried corm; ϕ tincture of the seeds, using proof spirit. Both the corm and seeds contains colchicia. The tincture of the seeds is reputed by some to be more active. Am.H.P.—Tincture, Class I.

COLLINSONIA CANADENSIS. N.O. Labiatæ. *Syn.* *Collinsonia scrotina*, *C. decussata*. Stone-root, Common Horse Weed, Rich Weed, Horse Balm. Habitat, North America. Flowers from July to September. Time for collecting, in early spring or late autumn. *Preparations.*—Tincture of the fresh root, corresponding in alcoholic strength with proof spirit, Process II.; trituration. *Dispensing forms.*— ϕ and upwards, tincture, tincture-trituration, pilules, or globules; or 1x to 3, trituration. *Additional.*
H.P.

tional preparation.—Tincture of the dried root, using proof spirit. Am.H.P.—Tincture of the fresh root, Class III.

COLOCYNTH. (*Citrullus Colocynthis.*) N.O. Cucurbitaceæ. *Syn.* *Cucumis colocynthis*, *Colocynthis vulgaris*. Colocynth, Bitter Cucumber, or Bitter Apple. Part employed, the fruit (pepo), deprived of the rind and seeds, as imported. For *characters and test*, see B.P. *Preparation.*—Tincture, using proof spirit, Process I. *Dispensing forms.*— ϕ and upwards, tincture, tincture-trituration, pilules, or globules. B.P. dose, 2 to 8 grains in powder. Am.H.P.—Tincture of the same, Process IV.

Comocladia Dentata. N.O. Anacardiaceæ. Guao. Habitat, Ouba and St. Domingo. Parts employed, the leaves and bark. *Preparation.*—Tincture, 20 o.p. spirit. Am.H.P.—Tincture of the fresh bark as Class III.

Condurango. (Condor Plant.) This is a climbing plant or shrub, found in Ecuador, the botanical position of which is at present undecided. Part employed, the bark. *Preparation.*—Tincture, using proof spirit, Process I.; trituration. Am.H.P.—Tincture of the dried bark, Class IV.; trituration.

Conium. (Conine or Conia, $C_8H_{17}N$.) *Syn.* Conicine, conine, conylia. A volatile, oily base, destitute of oxygen, obtained from *Conium maculatum*, especially the seeds, by distillation with potash ley. Is colourless, having a pungent, stupefying odour, and *very poisonous*. *Preparation.*—Solution in rectified spirit for 1x and upwards.

CONIUM MACULATUM. N.O. Umbellifereæ. *Syn.* *Cicuta vulgaris*, *Conium majus*, *Coriandrum cicuta*. Common or Spotted Hemlock, Kex, Herb Bennet. We use the entire fresh herb, collected in the summer, when both flower and fruit are present. Is found widely spread over Europe on the borders of streams, hedges, and fields. *Preparation.*—Tincture, corresponding in alcoholic strength with proof spirit, Process I. *Dispensing forms.*— ϕ and upwards, tincture, tincture-trituration, pilules, or globules. Average loss of moisture, 75 per cent. Am.H.P.—Tincture of the fresh plant, Class I.

Convallaria Majalis. (Ad.) N.O. Liliaceæ. Lily of the Valley. Recommended in heart disease. Contains two

peculiar principles—convallarin and convallamarin. *Preparation*.—Tincture of the fresh plant.

Convolvulus Scammonia. (Ad.) N.O. Convolvulacæ.

Habitat, Asia Minor. Tincture of the gum resin, chiefly imported from Smyrna; tincture of the dried root.

Copaiba. (Copaifera Langsdorffii, and other species of Copaifera.) N.O. Leguminosæ. *Syn.* C. officinalis. Balsam of Copaiva. We use the oleo-resin of the B.P. Soluble in absolute alcohol and ether. B.P. dose, 30 to 60 minims. Oleum copaibæ is the oil distilled from copaiva, and is given in doses of 5 to 20 minims. *Homæopathic preparation*.—Solution of the oleo-resin in absolute alcohol for 1x, using rectified spirit for 1 and upwards. *Dispensing forms*.—1x and upwards, tincture, pilules, or globules, Am.H.P. —Solution, Class VI. b.

CORALLIUM RUBRUM. *Syn.* Isis nobilis. Red Coral. This is the calcareous structure made by the coral zoophyte, and which from its beauty is manufactured into ornaments of various kinds. Select the small branched pieces, striated externally, and often covered with a white, calcareous substance. Wash them with distilled water. *Preparation*.—Trituration. *Dispensing forms*.—1x to 3, trituration only; 4 and upwards, tincture, tincture-trituration, pilules, or globules. Am.H.P.—Trituration.

Coriaria Ruscifolia. Coriaria Ruscifolia, Linn. N.O. Coriariacæ. Tutee, Tupa Kihî, Toot Plant. Habitat, New Zealand. We make a tincture of the seeds, using proof spirit.

Cornus Circinata. (Ad.) N.O. Cornacæ. Cornea. Green Osier, Round-leaved Dogwood. Native of the United States, flowering in June and July. Am.H.P.—Tincture of the fresh bark, Class III.

Corydalis Formosa. (Ad.) N.O. Famariacæ. Turkey Corn, Turkey Pea. Habitat, westward and southward of New York, to North Carolina. Part employed, the fresh and dried root. *Preparations*.—Tincture and trituration. Am.H.P.—Tincture of the fresh root, Class III.

Cosmoline. (Ad.) A pure, dense, neutral, concentrated oleaginous body, obtained from crude petroleum. *Preparations*.—Trituration and cerate.

Cotyledon Umbilicus. N.O. Crassulacæ. Wall Pennywort, Navelwort. Part employed, the fresh plant, collected before flowering. *Preparation.*— ϕ tincture (dilute alcohol). Average loss of moisture, 92 per cent. Am.H.P.—Tincture of the fresh leaves, Class III.

CROCUS. (Crocus Sativus.) N.O. Iridacæ. *Syn.* Crocus verus, Crocus autumnalis. Common Saffron Crocus. Habitat, Asia Minor. Parts employed, the dried stigmata and top of the style, as imported. *Characters.*—See B.P. *Preparation.*—Tincture, using rectified spirit. *Dispensing forms.*— ϕ and upwards, tincture, tincture-trituration, pilules, or globules. Am.H.P.—Tincture of same, Class IV.

CROTALUS. Rattlesnake. Habitat, America. Part employed, the venom, the active principle of which is Crota-line. *Collection.*—The venom of this deadly serpent is procured by pressing the gland whilst the serpent is either pinioned in a frame or narcotized by chloroform, and, as the venom drops from the fang, receiving it in a small graduated phial, and immediately preserving it in pure glycerine—1 part venom and 9 of glycerine. This is called ϕ , as the strongest officinal preparation. Glycerine is the best menstruum for preserving it; strong alcohol precipitates its active principle, and, being an animal substance, it will not keep in trituration (B.H.P.). *Preparation.*—For the 1 \times attenuation we use pure glycerine; for the first 5 centesimal, a mixture of 1 part glycerine and 3 parts proof spirit; and for 6 and upwards, spirit 20 o.p. *Dispensing forms.*—Below 6, tincture only; 6 and upwards, tincture, pilules, or globules. Am.H.P.—Trituration.

Croton Tiglium. N.O. Euphorbiacæ. Croton Tree, Croton Oil. Habitat, Hindostan, Ceylon, the Molucca Isles, and other parts of Asia. Parts employed, the seeds; also the oil expressed from them. *Preparations.*—1. Tincture of the seeds, 1 in 20, using absolute alcohol; 2. Solution of the oil in absolute alcohol, 1 in 20, using absolute alcohol for 1, and rectified spirit for all above. N.B.—The 1 in 20 solution of this oil will be at least double the strength of the mother tincture of the seeds. *Dispensing forms.*— ϕ and upwards, or Oleum crotonis, 1 in 20 and

upwards, tincture, pilules, or globules; 1 and upwards, tincture-trituration. Am.H.P.—Tincture of the seeds, Class IV.

Cubeba Officinalis. N.O. Piperaceæ. *Syn.* Piper cubeba. Cubebs of the B.P. Cultivated in Java. Parts employed, the dried unripe full-grown fruit. *Preparation.*—Tincture of the dried unripe fruit, rectified spirit. B.P. dose in powder, 30 to 120 grains. Am.H.P.—Tincture of the same, Class IV.

Cucurbita Pepo. N.O. Cucurbitaceæ. Pumpkin. Am. H.P.—Tincture of the fresh stems, Class III.

Cundurango. See CONDURANGO.

CUPRUM ACETICUM. (Normal Cupric Acetate, $\text{Cu}(\text{C}_2\text{H}_3\text{O}_2)_2 \cdot \text{H}_2\text{O}$) *Syn.* Cupri acetat. Acetate of Copper. Obtained by dissolving verdigris in hot diluted acetic acid, evaporating gently, and allowing it to crystallize. *Preparation.*—Solution in distilled water, 1 in 20. The 1 attenuation is made with distilled water to which 5 per cent. of rectified spirit has been added, 3x with dilute alcohol, 2 with 20 O.P. spirit, 5x and upwards with rectified spirit. N.B.—Triturations of this do not keep. *Dispensing forms.*—Below 3x, solution only; 2 and upwards, tincture, tincture-trituration, pilules, or globules. Am.H.P.—Trituration.

Cuprum Arsenicosum. (Hydric-cupric Arsenite, CuHAsO_3 .) Arsenite of Copper. This is the well-known Scheele's green, and may be obtained by mixing solutions of arsenite of potash and sulphate of copper, and collecting the green precipitate, washing carefully and drying it. *Preparation.*—Trituration. *Dispensing forms.*—1x to 3, trituration only; 4 and upwards, tincture, tincture-trituration, pilules, or globules. Am.H.P.—The same.

Cuprum Carbonicum. (Hydrated Dibasic Cupric Carbonate, $\text{CuCO}_3 \cdot \text{CuH}_2\text{O}_2 \cdot \text{H}_2\text{O}$.) *Syn.* Cupri carbonas. Can be obtained pure of the operative chemist. *Preparation.* B.H.P. and Am.H.P.—Trituration.

CUPRUM METALLICUM. (Copper, Cu.) In the second edition of the B.H.P. pure copper foil was directed to be used. In the present, or third, it is obtained by decomposing a solution of sulphate of copper by means of polished

iron rods, upon which it is deposited in fine powder. Collect the metallic powder in a stoppered bottle, and wash it repeatedly in distilled water; then pour over it a solution of hyposulphite of soda, and after shaking it well for ten minutes, throw it on a filter, wash it thoroughly with distilled water, and dry it between folds of filtering paper without heat. *Preparation*.—Trituration. *Dispensing forms*.—1*x* to 3, trituration only; 4 and upwards, tincture, tincture-trituration, pilules, or globules. Am.H.P.—Trituration.

CUPRUM SULPHURICUM. (Cupric Sulphate, $\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$.) Sulphate of Copper, Blue Vitriol. See B.P. for characters and tests. Solubility in water, 1 in 3, 1 in 2½ of glycerine, insoluble in rectified spirit. *Preparation*.—Solution in distilled water for 1*x*, distilled water to which 5 per cent. of rectified spirit has been added for 1, dilute alcohol for 3*x*, 20 O.P. spirit for 2, and rectified spirit for 5*x* and upwards. *Dispensing forms*.—1*x* to 3*x*, solution only; 2 and upwards, tincture, tincture-trituration, pilules, or globules. Am.H.P.—Trituration.

Curare. *Syn.* Woorali, Woorara, Urari, Ourari. The arrow poison used by the savage tribes of South America. Its composition is unknown, but it is evidently very complex. It has been supposed to contain some animal poison (probably snake poison), in addition to various vegetable poisons, especially those of the Strychnos order (Loganiaceæ) or the Euphorbiaceæ. An alkaloid has been obtained from it, which possesses its poisonous properties in a high degree (B.H.P.). *Preparation*.—Tincture, 1 in 20, using proof spirit, Process III. *Dispensing forms*.— ϕ and upwards, tincture, tincture-trituration, pilules, or globules. Am.H.P.—Trituration.

CYCLAMEN EUROPÆUM. N.O. Primulaceæ. *Syn.* C. hederæfolium, C. vernum, C. neopolitanum. Sowbread. Habitat, Southern Europe and Western Asia. Cultivated in England, and almost naturalized in some places in the south and east of England. Flowers in Autumn. Time for collecting, before and after flowering. *Preparation*.—Tincture of the fresh tuber, corresponding in alcoholic strength with proof spirit, Process II. *Dispensing forms*.

— ϕ and upwards, tincture, tincture-trituration, pilules, or globules. Average loss of moisture, 75 per cent. Am.H.P.

—Tincture of same, Class I.

Cypripedium Pubescens. (Ad.) N.O. Orchidaceæ. Large Yellow Lady's Slipper. Habitat, bogs and low woods of North America, and southward, in the Alleghanies. Flowering time, May and June. Am.H.P.—Tincture of the fresh root, Class III.

Cytisus Laburnum. N.O. Leguminosæ. Laburnum. Habitat, Europe and America. Part employed, the seeds. *Preparation.*— ϕ tincture, using dilute alcohol.

Damiana. (Ad.) Great doubt exists respecting the source of damiana, there being two or three substances sold under the one name. One specimen was said to be *Bigelovia veneta*, another *Tunera aphrodisiaca*. *Preparation.*—Tincture.

Daphne Indica. N.O. Thymelacææ. *Syn.* *Daphne odora*, *D. Lagetto*. Sweet-scented Spurge Laurel. Habitat, the West Indies and China. Part employed, the bark of the branches. *Preparation.*—Tincture, using rectified spirit, Process I. *Dispensing forms.*— ϕ and upwards, tincture, tincture-trituration, pilules, or globules. Am.H.P.—Tincture of the fresh bark, Class III.

Daucus Carota. (Ad.) N.O. Umbelliferaæ. Wild Carrot. Habitat, Europe. The seeds used as infusion in lithiasis. *Preparation.*—Tincture of the seeds.

Decocta. (Decoctions.) "Not generally recognized, but are occasionally ordered. Prepare the drug as directed for Infusions, put it into a porcelain dish, then pour 10 fluid ounces of distilled water for every 1 ounce of dry material over it; place the dish over a water-bath, raise it to 200° F., and keep it at that temperature for half an hour, when the fluid may be decanted and filtered. If attenuations of decoctions are required, they must be made as soon as the preparations are ready, pure distilled water being used for the first decimal and centesimal attenuations, dilute alcohol for the third decimal, and rectified spirit for the second centesimal and upwards" (B.H.P.).

Digitaline. (Ad.) The alkaloid obtained from digitalis. Solubility, slightly in water, 1 in 12 of cold alcohol. A powerful and dangerous poison. B.P. dose, $\frac{1}{30}$ to $\frac{1}{15}$ of a grain. *Preparation.*—Trituration, 1 and upwards.

DIGITALIS. (*Digitalis Purpurea*.) N.O. Scrophulariaceæ. *Syn.* *Digitalis speciosa*. Purple Foxglove. Habitat, Western and Central Europe and Great Britain. Flowers in spring and summer. Part employed, the leaves of two-year-old plants, collected when about two-thirds of the flowers are expanded. *Preparation.*—Tincture, corresponding in alcoholic strength with dilute alcohol, Process I. *Dispensing forms.*— ϕ and upwards, tincture, tincture-trituration, pilules, or globules. Average loss of moisture, 84 per cent. Am.H.P.—Tincture of the fresh leaves, Class I.

Dilutions. See ATTENUATIONS.

DIOSCOREA VILLOSA. N.O. Dioscoreaceæ. *Syn.* *D. paniculata*, *D. quinata*. Hairy Yam, Colic Root. Habitat, America; found in the thickets from New England to Wisconsin, and in the Southern States. Flowering time, June. Part employed, the root, before flowering, and when the stem dies down in autumn. *Preparations.*—Tincture, corresponding in alcoholic strength with proof spirit. *Dispensing forms.*— ϕ and upwards, tincture, tincture-trituration, pilules, or globules. Am.H.P.—Tincture of the fresh root, Class III.

Dioscorein. The resinoid prepared from *Dioscorea villosa*. *Preparation.*—Trituration.

Distilled Water. See AQUA DESTILLATA.

Dolichos Pruriens. N.O. Leguminosæ. *Syn.* *Mucuna pruriens*. Cowhage, or Cow-itch. Habitat, West Indies and America. Parts employed, the setæ which cover the pods. *Preparation.*— ϕ tincture, using proof spirit. When making this tincture care should be taken not to allow any to get on the skin, or the result will be very unpleasant. If by accident any should do so, apply olive oil to the part affected. Am.H.P.—Tincture, Class IV.

Doryphora Decimlineata. The Colorado Beetle, or Potato Bug. Part employed, the entire insect. *Preparation.*— ϕ tincture, using dilute alcohol; trituration. Am.H.P.—Tincture, Class IV.

Dose.—"It is essential to the principles of homœopathy that medicines should be given in doses too small to produce their physiological effects. As regards minuteness of dose, however, there is no fixed limit; and hence it follows that all doses have their advocates, ranging from a few drops of the mother tincture up to the highest attenuations" (B.H.P.).

DROSERA ROTUNDIFOLIA. N.O. Droseraceæ. *Syn.* Rosella rotundifolia, Ros solis, Drosera capillaris. Round-leaved Sundew, Red-rot, Moor-grass. Habitat, in bogs and wet heathy ground throughout Central and Northern Europe and Great Britain. Parts employed, the entire fresh plant, at the commencement of flowering, in summer, and early autumn. *Preparation.*—Tincture, corresponding in alcoholic strength with proof spirit, Process I. *Dispensing forms.*— ϕ and upwards, tincture, tincture-trituration, pilules, or globules. Average loss of moisture, 80 per cent. Am.H.P.—Tincture as Class I.

DULCAMARA. (Solanum Dulcamara.) N.O. Solanaceæ. *Syn.* Dulcamara flexuosa, Vitis sylvestris. Woody Nightshade, Bittersweet, Felon-wood. Habitat, hedges and thickets in moist, shady places, all over Europe. Parts employed, leaves and young stems collected before flowering in the summer. *Preparation.*—Tincture, corresponding in alcoholic strength with proof spirit, Process I. *Dispensing forms.*— ϕ and upwards, tincture, tincture-trituration, pilules, or globules. Average loss of moisture, 79 per cent. Am.H.P.—Tincture of same, Class I.

Elaps Corallinus. The Coral Snake of Brazil. Part employed, the venom, procured as directed under CROTALUS. *Preparation.*—Solution in glycerine. *Dispensing forms.*—Below 6, tincture only; 6 and upwards, tincture, pilules, or globules. Am.H.P.—Trituration of the venom.

Elaterium. (Ecbalium Officinarum.) N.O. Cucurbitaceæ. *Syn.* Momordica elaterium, Ecbalium agreste. Squirting Cucumber. Habitat, Greece, and many parts of the South of Europe. Flowering time, July. Part employed, a sediment from the juice of the fruit, obtained as directed

in the B.P. 1867. *Preparation.* Trituration. *Dispensing forms.*—1 \times to 3, trituration only; 4 and upwards, tincture, tincture-trituration, pilules, or globules. *Ad.*—Tincture of the fresh squirting cucumber. B.P. (1867) dose of Elaterium, $\frac{1}{10}$ to $\frac{1}{2}$ grain. The official B.P. (1885) Elaterium (Elaterin, $C_{20}H_{33}O_6$) is the active principle of Elaterium, and is obtained by exhausting Elaterium with chloroform, adding ether to the chloroformic solution, collecting the precipitate, washing the latter with ether, and purifying by re-crystallisation from chloroform. The B.P. dose of this is $\frac{1}{20}$ to $\frac{1}{10}$ grain, is a more powerful preparation, and the two should not be confounded. A trituration of this may be made. Am.H.P.—Tincture of the expressed juice, Class I.

Emplastra. Arnica plaister may be prepared as follows:—Take of isinglass, in shreds, 1 ounce; tincture of arnica, 6 fluid drachms; distilled water, a sufficiency. Dissolve the isinglass by first digesting and then boiling in a sufficient quantity of the water, filter through clean tow moistened with distilled water, and evaporate the solution on a water bath until its weight is reduced to 10 ounces. Spread about three-fourths of this on silk or other suitable material, add the tincture of arnica to the remainder, and complete the spreading. Calendula plaister may also be prepared in the same manner.

Epigea Repens. (Ad.) N.O. Ericaceæ. The trailing Arbutus, Ground Laurel, May Flower of New England. Habitat, sandy woods in the shade of the pines of America. Chiefly affects the urinary organs. Am.H.P.—Tincture of the fresh leaves, Class III.

Equisetum Hyemale. N.O. Equisetaceæ. Horse-tail, Scouring Rush. Habitat, wet banks, North America and Europe. Chiefly affects the urinary passages. Part employed, the fresh plant. *Preparation.*—Tincture, dilute alcohol. Am.H.P.—Tincture of fresh plant, Class III.

Erethites Hieracifolius. (Ad.) N.O. Compositæ. *Syn.* Senecio hieracifolius. Fire Weed—a species of Groundsel. Habitat, moist woods in United States; common in recent clearings, where the ground has been burned over, whence its popular name. Blooms July to

September. Am.H.P.—Tincture of the fresh plant, Class III.

Ergotin. (Ad.) The alkaloid obtained from Ergot. *Preparation.*—Trituration.

Erigeron Canadense. N.O. Compositæ. Flea-bane, Horse Weed, Butter Weed. Habitat, a common weed, widely diffused over the world. Flowers July to October. *Preparation.*—Tincture of the fresh flowering plant. Am.H.P.—Same, Class III.

Eriodictyon Californicum. (Ad.) N.O. Hydrophyllaceæ. *Syn.* Eriodictyon glutinosum. Yerba Santa, Mountain Balm, Consumptive's Weed, Bear's Weed. Am.H.P.—Tincture of the fresh leaves, Class III.

Eryngium Aquaticum. N.O. Umbelliferae. Button Snake-root. Habitat, North America. Part employed, the root. *Preparations.*—Tincture, dilute alcohol; trituration of the dried root. Am.H.P.—Tincture of the fresh root, Class III.

Eryngium Maritimum. (Ad.) N.O. Umbelliferae. Sea Holly. Habitat, Europe and Northern Africa. Am.H.P.—Tincture of the fresh plant, Class III.

Erythroxylon Coca. N.O. Erythroxylaceæ. Coca, Cuca. Habitat, South America, and largely cultivated in Bolivia. Parts employed, the leaves. For characters *see* B.P. *Preparation.*—Tincture, proof spirit. B.P. dose, 30 to 20 grains. Am.H.P.—Tincture of dried leaves, Class IV.

Eserina. (Ad.) Eserine. An alkaloid obtained from the integument or shell of *Physostigma venenosum*, in the form of a brown, sticky extract, very deliquescent, and soon spoils. *Preparation.*—Solution in distilled water.

Eserine Sulphas. (Ad.) (Sulphate of Eserine.) Obtained in brown scales, which are very deliquescent. Acts as a stimulant to the liver. *Preparation.*—Solution in distilled water.

Ether. *See* **Æther.**

Ethyl Bromidum. (Ad.) (Ethyl Bromide, C_2H_5Br .) Bromide of Ethyl, or Bromethane. It is obtained by pouring upon 1 part of white or red phosphorus, in a retort, 40 parts of alcohol of 0.840, adding $\frac{1}{2}$ parts of bromine in rapid drops, distilling, washing the distillate

with water, drying with calcium chloride, and rectifying it. Used as an anæsthetic.

Eucalyptus Globulus. N.O. Myrtaceæ. Fever Tree, Australian Gum Tree. A large Australian and Tasmanian tree. Parts employed, the dried leaves. *Preparation.*—Tincture, using 20 O.P. spirit. Am.H.P.—Tincture of fresh leaves, Class III.

Eugenia Jambos. N.O. Myrtaceæ. *Syn.* Jambosa vulgaris, Myrtus jambos. Malabar Plum Tree, Rose Apple. Parts employed, the fresh seeds. *Preparation.*—Tincture. Am.H.P.—Tincture of the fresh seeds, Class III.

Euonymus Atropurpureus. (Ad.) N.O. Celastraceæ. *Syn.* Euonymus Caroliniensis, Euonymus Tristis. Wahoo, Spindle Tree, Burning Bush. Habitat, Northern and Western States of America. Am.H.P.—Tincture of the fresh bark of the twigs and root, Class III.

Euonymus Europæus. N.O. Celastraceæ. Spindle Tree. Part employed, the ripe fruit. *Preparation.*—Tincture, proof spirit. Am.H.P.—Tincture of the fresh fruit as soon as it begins to turn red, Class I.

Eupatorium Aromaticum. (Ad.) N.O. Compositæ. *Syn.* Pool Root, White Snake Root. Habitat, Massachusetts to Virginia, and southward, near the coast. Am.H.P.—Tincture of the fresh root, Class III.

EUPATORIUM PERFOLIATUM. N.O. Compositæ. *Syn.* E. connatum, E. Virginicum. Bone-set, Ague Weed, Thoroughwort, Crosswort. Habitat, North America. Flowering time, June to October. Parts employed, the entire plant. Time for collecting, while in flower. *Preparation.*—Tincture, corresponding in alcoholic strength with proof spirit, prepared in, and imported from, North America. *Dispensing forms.*— ϕ and upwards, tincture, tincture-trituration, pilules, or globules. *Additional preparation.*— ϕ tincture from the imported herb, proof spirit. Am.H.P.—Tincture of the fresh herb just in bloom, Class III.

EUPATORIUM PURPUREUM. N.O. Compositæ. Gravel Root, Queen of the Meadow, Trumpet Weed. Habitat, America, in swamps and low grounds. Flowering time, August and September. Part employed, the fresh root.

Characters.—"A perennial, herbaceous plant; stem stout, solid, green, or sometimes purplish, with a purple band at the joints about 1 in. wide, from 3 to 6 feet high; leaves feather-veined in whorls of three, four and five (rarely two), ovate, oblong-ovate or lanceolate, smooth above, downy on the veins beneath, coarsely serrate, thin, 8 to 10 inches long, by 4 to 5 inches wide; flowers in a dense and compound corymb, pale purple ranging to whitish; heads cylindrical, five to ten-flowered; scales purplish, numerous, closely imbricated in several rows of unequal length, slightly striate; root long, knotty, fibrous, white or brownish, bitter, aromatic, and faintly astringent" B.H.P. Time for collecting, before flowering, or when the herb is dying down, in autumn. *Preparation*.—Tincture, corresponding in alcoholic strength with proof spirit, prepared in, and imported from, North America. *Dispensing forms*.— ϕ and upwards, tincture, tincture-trituration, pilules, or globules. *Additional preparation*.— ϕ tincture of the imported dry root. Am.H.P.—Tincture of the fresh root gathered in autumn, Class III.

Euphorbia Corollata. N.O. Euphorbiaceæ. Large-flowering Spurge. Habitat, North America. Part employed, the root. *Preparation*.—Tincture, proof spirit. Am.H.P.—Tincture of the fresh root, Class III.

Euphorbia Hypericifolia. (Ad.) N.O. Euphorbiaceæ. Milk Parsley, Spurge. Habitat, very common in the United States. Am.H.P.—Tincture of the fresh plant, Class III.

Euphorbia Pilulifera. (Ad.) Mentioned by Dr. Searle, of Brisbane, in the *Homœopathic World* for Sept. 1881, as being an excellent remedy for asthma. *Preparation*.— ϕ tincture.

Euphorbia Villosa. (Ad.) N.O. Euphorbiaceæ. *Syn.* Euphorbia pilosa, Euphorbia sylvestris. Spurge. Habitat, South of France, Germany, and Western Siberia. *Preparation*.—Tincture. Am.H.P.—Tincture of the fresh root, Class III.

EUPHORBIIUM. (Euphorbia Resinifera.) N.O. Euphorbiaceæ. *Syn.* Euphorbia officinarum, E. tenella, Euphorbium polygonum. Spurge. Habitat, Africa. Part em-

ployed, the gum-resin, as imported. *Characters*.—Dull, yellowish-white, friable tears of irregular shape and size, generally hollow, nearly inodorous; taste intensely acrid. The powder irritates the nostrils and eyes exceedingly. Time for collecting, September. *Preparation*.—Tincture, using rectified spirit, Process III. *Dispensing forms*.— ϕ and upwards, tincture, tincture-trituration, pilules, or globules. Am.H.P.—Tincture of the powdered gum-resin, Class IV.

EUPHRASIA. (*Euphrasia Officinalis*.) N.O. Scrophulariaceæ. *Syn.* *E. candida*, *Euphrasia alba*. Eyebright. Habitat, in pastures throughout Europe and Asia; abundant in Great Britain. Flowering time, summer and autumn. Parts employed, the entire plant. Time for collecting, July. *Preparation*.—Tincture, corresponding in alcoholic strength with proof spirit, Process I. *Dispensing forms*.— ϕ and upwards, tincture, tincture-trituration, pilules, or globules. Average loss of moisture, 67 per cent. Am.H.P.—Tincture of the fresh plant, omitting the root, Class II.

Eupion. (Ad.) This is one of the products resulting from the dry distillation of wood. Am.H.P.—Solution in 95 per cent. alcohol, Class VI. b.

Eupurpurin. (Ad.) The resinoid obtained from *Eupatorium purpureum*. *Preparation*.—Trituration, 1x to 3.

Extractum Filicis Liquidum. Liquid Extract of Male Fern of the B.P. Dose, 15 to 30 minims.

Fagopyrum. (*Fagopyrum Esculentum*.) N.O. Polygonaceæ. *Syn.* *Polygonum fagopyrum*. Buckwheat. Habitat, Asia, but now common in Europe and North America. Parts employed, the whole mature plant. *Preparation*.—Tincture, 20 o.p. spirit. Am.H.P.—Tincture of the fresh mature plant, Class III.

Farfara. See TUSSILAGO FARFARA.

Ferri et Strychniæ Citras. (Ad.) Citrate of Iron and Strychnia. A mixture of citrate of strychnia with ammonio-ferric citrate, scaled in the same manner as the other iron

preparations. *Preparation*.—Trituration, $1x$ to $3x$. Am.H.P.
—Trituration, Class VII.

FERRUM ACETICUM. (Ferric Acetate, $Fe_2(C_2H_3O_2)_6$.)

Syn. Ferri acetas. Acetate of Iron. Prepared by dissolving moist peroxide of iron in acetic acid until saturated, and concentrating the solution by evaporation on a water bath, until a portion of the liquid withdrawn on the end of a glass rod, and stirred on a watch-glass, quickly assumes a jelly-like appearance, and the remainder, when cooled, has a specific gravity of at least 1.288. It may be kept in this form or cautiously evaporated to dryness. It should be freshly made, and preserved in well-stoppered bottles.

Preparation.—Solution in distilled water for $1x$, using dilute alcohol up to $3x$, and afterwards rectified spirit.

Dispensing forms.— ϕ to 1, solution only; $3x$ and upwards, tincture, tincture-trituration, pilules, or globules. *Additional preparation*.—Solution in rectified spirit, $1x$ pilules. Am.H.P.—Solution in distilled water, Class V. a; trituration, Class VII.

Ferrum Arsenicum. (Triferric Diarsenate, $Fe_2As_2O_8$.)

Syn. Ferri arsenias. Arseniate of Iron of the B.P., where see characters and tests. B.P. dose, $\frac{1}{16}$ to $\frac{1}{2}$ grain. *Homœopathic preparation*.—Trituration. Am.H.P.—Trituration, Class VII.

Ferri Bromidum. (Ad.) (Bromide of Iron, $FeBr_2$.) A brick-red, deliquescent salt, very soluble in water. May be obtained by heating gently, in 80 parts of water, 2 parts of bromine and 1 of iron filings. When the liquid has become greenish it is filtered and evaporated to dryness. This is again dissolved, and again evaporated to dryness. *Preparation*.—Solution in water, &c. Am.H.P.—Trituration.

Ferrum Carbonicum. (Ferrous Carbonate, $FeCO_3$.)

Syn. Ferri carbonas saccharata. Saccharated Carbonate of Iron of the B.P., where see characters and tests. B.P. dose, 5 to 20 grains. *Homœopathic preparation*.—Trituration, using 3 parts to 7 parts of sugar of milk to make $1x$. *Dispensing forms*.— $1x$ to 3, trituration only; 4 and upwards, tincture, tincture-trituration, pilules, or globules. Am.H.P.—Trituration, Class VII.

FERRUM IODATUM. (Ferrous Iodide, FeI_2 .) *Syn.* Ferri iodidum. Saccharated Iodide of Iron. A syrup prepared as directed in the B.P. *Preparations.*—1. The B.P. syrup contains about 1 grain in 14 minims, and hence 14 minims diluted with 86 minims of syrup will make 1; equal measures of syrup and distilled water to which 5 per cent. of rectified spirit has been added should be used for 3*x*, dilute alcohol for 2, and rectified spirit for 5*x* and upwards. 2. Trituration of the freshly prepared saccharated powder, in a warm mortar, with an equal weight of sugar of milk will form the 1*x*, from which the higher triturations are made in the usual manner. N.B.—Preparations of iodide of iron are best preserved in small, well-filled, stoppered bottles of amber glass; they soon begin to decompose in partly filled bottles which are frequently opened. *Dispensing forms.*—1*x* to 3, trituration, or 1 to 2, solution; 5*x* and upwards, tincture, tincture-trituration, pilules, or globules. Am.H.P.—Trituration, Class VII.

Ferrum Lacticum. (Ferrous Lactate, $\text{Fe}(\text{C}_2\text{H}_3\text{O}_2)_2 \cdot 2\text{H}_2\text{O}$.) *Syn.* Ferri lactas. May be prepared by digesting an excess of pure iron filings in diluted lactic acid on a water-bath until the action has ceased, crystallizing, washing the crystals with rectified spirit, and drying them on filtering paper. *Preparation.*—Trituration. Am.H.P.—Trituration, Class VII.

FERRUM MAGNETICUM. (Ferroso-ferric Oxide, $\text{FeO} \cdot \text{Fe}_2\text{O}_3$.) *Syn.* Ferri oxidum magneticum. Black, or Magnetic Oxide of Iron, of the B.P. 1867, Loadstone, combined with about 20 per cent. of water of hydration, and containing some Peroxide of Iron. For mode of preparation, characters and tests, see B.P. 1867. *Homœopathic preparation.*—Trituration. *Dispensing forms.*—1*x* to 3, trituration only; 4 and upwards, tincture, tincture-trituration, pilules, or globules. Am.H.P.—Trituration, Class VII.

FERRUM METALLICUM. (Iron, Fe.) Pure iron filings, prepared from wrought iron by means of a new file, and sifted through fine linen. *Preparation.*—Trituration. *Dispensing forms.*—1*x* to 3, trituration only; 4 and upwards, tincture, tincture-trituration, pilules, or globules.

FERRUM MURIATICUM. (Ferric Chloride, Fe_2Cl_6 .)

Syn. Ferri perchloridum, Ferrum sesquichloratum. Perchloride of Iron, Muriate of Iron. The Liquor Ferri Perchloridi Fortior of the British Pharmacopœia. *Preparation.*—Mix $2\frac{1}{2}$ fluid drachms of the B.P. liquor with $10\frac{1}{2}$ fluid drachms of rectified spirit to form the *1x* attenuation. Rectified spirit is used for all attenuations above this. *Dispensing forms.*—*1x* and 1, tincture only; *3x* and upwards, tincture, tincture-trituration, pilules, or globules. *Am.H.P.*—Solution of pure chloride of iron in alcohol, 1 in 10 by weight.

Ferrum Oxydatum Humidum. (Moist Hydrated Ferric Oxide, $\text{Fe}_2\text{O}_3 \cdot \text{H}_2\text{O}$.) *Syn.* Ferri peroxidum Humidum of the B.P. 1867. Ferrum Hydricum in Aqua. Prepared according to the B.P. 1867, where *see* characters and tests. *Preparation.*—Used chiefly for preparing Ferrum aceticum.

FERRUM PHOSPHORICUM. (Ferrous Phosphate, $\text{Fe}_2(\text{PO}_4)_3 \cdot 8\text{H}_2\text{O}$, at least 47 per cent. with ferric phosphate and some oxide.) *Syn.* Ferri phosphas. Prepared according to the B.P., where also *see* characters and tests. B.P. dose, 5 to 10 grains. *Preparation.*—Trituration. *Am.H.P.*—Trituration, Class VII.

FERRUM PYROPHOSPHORICUM. *Syn.* Ferri pyrophosphas. This is a scale preparation, containing about 55 per cent. of Pyrophosphate of Iron ($\text{Fe}_2\text{P}_2\text{O}_7$), combined with Citrate of Soda. *Preparation.*—60 grains of the scales may be dissolved in $8\frac{1}{2}$ fluid drachms of distilled water, and then 1 fluid drachm of rectified spirit may be added. This causes a precipitate at first, but it is redissolved by shaking. This solution constitutes *1x*; 1 must be made with a mixture of distilled water 3 parts, and rectified spirit 1 part; *3x* with proof spirit, 2 with spirit 20 O.P., and *5x* and upwards with rectified spirit. *Am.H.P.*—Trituration, Class VII.

FERRUM REDACTUM. Reduced Iron of the B.P. Metallic Iron, with a variable quantity of Magnetic Oxide of Iron. For preparation, characters and tests, *see* B.P. Should be carefully preserved in a dry, stoppered bottle. B.P. dose, 1 to 5 grains. *Preparation.*—Trituration.

Dispensing forms.—1 \times to 3, trituration only ; 4 and upwards, tincture, tincture-trituration, pilules, or globules. Am.H.P.—Trituration, Class VII.

FERRUM SULPHURICUM. (Ferrous Sulphate, $\text{Fe SO}_4 \cdot 7\text{HO.}$) *Syn.* Ferri sulphas. The green vitriol of commerce, purified by re-crystallization. For characters and tests *see* B.P. Dose 1 to 5 grains. *Homœopathic preparations.*—Trituration ; solution in distilled water. Neither of these preparations, however, keep well. The solution may be rendered much more stable by adding a few drops of diluted sulphuric acid. Am.H.P.—Trituration, Class VII.

FILIX MAS. (*Aspidium Filix mas.*) N.O. Filices. *Syn.* Lastrea F. m., polypodium F. m. Male Fern. This well-known fern is very common in Britain. We use the fresh root-stock, collected in autumn, when the fronds are dying. *Preparation.*—Tincture corresponding in alcoholic strength with 20 O.P. spirit, Process I. *Dispensing forms.*— ϕ and upwards, tincture, tincture-trituration, pilules, or globules. Average loss of moisture, 71 per cent. Am.H.P.—Tincture of the fresh main root, Class III.

Formica Rufa. (Ad.) Ant, Wood Ant, Red Ant, Pismire. Am.H.P.—Tincture of the live insect, Class IV.

Fragaria Vesca. (Ad.) N.O. Rosaceæ. *Syn.* Fragulæ, Trifolii fragiferi. Wood Strawberry. Habitat, Europe, and greater portion of America. Am.H.P.—Tincture of the ripe berries, Class III.

Frasera Carolinensis. (Ad.) N.O. Gentianaceæ. *Syn.* Fräsera Walteri, Swertia difformis. American Columbo, Indian Lettuce. Habitat, Southern and Western portions of the United States. Am.H.P.—Tincture of the fresh root, Class III.

Fucus Vesiculosus. (Ad.) N.O. Algæ. *Syn.* Quercus marina, Sea Wrack, Bladder Wrack, Sea Kelp. Habitat, shores of Europe and America. *Preparation.*—Tincture, proof spirit, and fluid extract. Extolled as a remedy for obesity. Am.H.P.—Tincture, Class III.

Fuligo. Soot, impure Carbon. *Preparation.*—Trituration.

Galium Aparine. (Ad.) N.O. Galiaceæ. Cleavers, Goose Grass, Poor Robin, Savoyan. Habitat, Europe, Asia and North America. *Preparation.*—Tincture. Am.H.P.—Tincture of the fresh herb in flower, Class III.

GAMBOGIA. *Garcinia Morella*, *Desrous*, var. *pedicellata*. N.O. Guttiferæ. *Syn.* Gummi gutti, *Garcinia Hanburii*, Cambogia. Gamboge. Habitat, Siam and Cochin China. Part employed, the gum-resin, as imported. *Preparation.*—Tincture, 1 in 20, using rectified spirit, Process III. *Dispensing forms.*— ϕ and upwards, tincture, tincture-trituration, pilules, or globules. Am.H.P.—Solution in alcohol. Class IV.

Gaultheria Procumbens. (Ad.) N.O. Ericaceæ. Creeping Winter-green. In the interior it is sometimes called Winter-green, Tea-berry; eastward it is called Chicker-berry, or Partridge-berry, also Box-berry; care must therefore be taken not to confound this plant with *Mitchella repens*, from the similarity of common names applied to one and both. Habitat, northward and southward along the Alleghanies. Flowers in July. Part employed, leaves. *Preparation.*—Tincture. An oil also is obtained from the seeds. On examination after death from poisoning by oil of *Gaultheria*, strong marks of gastric inflammation were discovered.

GELSEMIUM SEMPERVIRENS. N.O. Loganiaceæ. *Syn.* *Gelsemium nitidum*, *Bignonia sempervirens*. Yellow Jessamine, Field Jessamine, Woodbine. Habitat, Southern States of America. Flowering time, March till May. Part employed, the root. *Preparation.*—Tincture, corresponding in alcoholic strength with proof spirit, Process I. The tincture from the fresh root is imported. *Dispensing forms.*— ϕ and upwards, tincture, tincture-trituration, pilules, or globules. Am.H.P.—Tincture of the fresh root, Class III.

Gentiana Cruciata. N.O. Gentianaceæ. Cross-wort Gentian. *Preparation.*—Tincture of the root with proof spirit. Am.H.P.—Tincture of the fresh root, Class III.

Gentiana Lutea. N.O. Gentianaceæ. *Syn.* *G. lutea*.

Yellow Gentian Root of the B.P. *Preparation*.—Tincture, proof spirit. Am.H.P.—Tincture of the fresh root, Class III.

Gentiana Quinqueflora. (Ad.) N.O. Gentianaceæ. The Five-flowered Gentian. Habitat, in dry, hilly woods at Maine to Wisconsin and southward. Part employed, the herb. *Preparation*.—Fluid extract; tincture. Used in America instead of quinine, for ague, &c.

Geranium Maculatum. (Ad.) N.O. Geraniaceæ. Wild Cranesbill, Spotted Geranium, Alum Root, Crowfoot. Habitat, open woods and fields of Europe and America. Flowering time, April to July. Part employed, the root. *Preparation*.—Tincture, dilute alcohol. Am.H.P.—Tincture of the fresh root, Class III.

Geranium Robertianum. (Ad.) N.O. Geraniaceæ. Herb Robert. Habitat, Europe and North America. Am. H.P.—Tincture of the fresh root, Class I.

Ginseng. (Panax Ginseng.) N.O. Araliaceæ. *Syn.* P. quinquefolium. This plant is found in China, northern Asia, and North America. The root constitutes Ginseng, much prized by the Chinese as a stimulant and aphrodisiac. *Preparation*.—Tincture of the root, proof spirit. Am.H.P.—Tincture of the dried root, Class IV.

Globules—to Medicate. *See* PILULES. N.B.—Unmedicated globules should be obtained from the manufacturing homœopathic chemist, and not from the confectioner.

Glonoinum. (Glyceric Trinitrate, $C_3H_5(NO_3)_3$.) Glonoine, Nitro-glycerine. Prepared by the action of a mixture of nitric and sulphuric acids upon glycerine. The process in the hands of any but experienced persons is a most dangerous one, and as a 10 per cent. solution in absolute alcohol can be obtained pure, the preparation need not be attempted. *Preparation*.—Solution in absolute alcohol, 10 per cent. by weight, or 1 grain in 14 minims nearly. 100 minims diluted with rectified spirit till it measures $1\frac{1}{2}$ fluid ounce will form the 1 attenuation, and rectified spirit may be used for all above. *Dispensing forms*.—1 in 14 and upwards, tincture, pilules, or globules. Am.H.P.—Solution in 95 per cent. alcohol, Class VI. a.

Glycerine. *See* GLYCERINUM.

Glycerinum. Glycerine. A sweet principle ($C_3H_5(OH)_3$),

obtained by reaction of fats and fixed oils with aqueous fluids, and containing a small percentage of water. It should answer the following B.P. characters and tests.—“A clear colourless fluid, oily to the touch, without odour, of a sweet taste; freely soluble in water and in alcohol. When decomposed by heat it evolves intensely irritating vapours. Specific gravity about 1.25. Its solution is not affected by nitrate of silver, sulphhydrate of ammonium, oxalate of ammonium, or chloride of barium, and does not alter the colour of moistened blue or red litmus paper. Shaken with an equal volume of sulphuric acid, no coloration, or only a very slight straw coloration, should result. When gently heated with diluted sulphuric acid, no rancid odour is produced.” Solubility, in all proportions with water and alcohol, but insoluble in chloroform, ether and oils. It dissolves borax, carbolic acid, iodine, the iodide of sulphur, the chlorides of potassium and sodium, salicylic acid, nitrate of bismuth, the fixed alkalies, some of the alkaline earths, and a large number of neutral salts. It also dissolves the vegetable acids, and either suspends or dissolves the vegetable alkaloids. Many solutions are made with it for medicinal purposes, as of the salts of morphia, quinia, strychnia, veratria, atropia, tannic and gallic acids, and arsenic. It is antiseptic, 1 part to 10 water preserving animal substances equal to spirit. Sp. gr. 1.250, and contains 5 per cent. of water. Found in commerce, 1.260 (*Squire*).

Glycerinum Amyli. (Glycerine of Starch.) A very suitable form of ointment, prepared as directed in the B.P.

Glyceroles hold a place intermediate between ointments and liniments, and are very convenient preparations, being soluble in all proportions in water and alcohol; adaptable for liniments, lotions and injections. These consist of the drug mixed with glycerine in the usual proportions as for ointment.

Gnaphalium Polycephalum. N.O. Compositæ. Cud Weed, Sweet-scented Life Everlasting. Native of Canada and parts of the United States. *Preparation.*—Tincture of the fresh herb, dilute alcohol. Am.H.P.—Tincture of the fresh plant, Class III.

Gossypium Herbaceum. (Ad.) N.O. Malvaceæ. *Syn.* *Lana gossypii.* Cotton Plant. Native of Asia, but cultivated south of Virginia. Am.H.P.—Tincture of the fresh inner root-bark, Class III.

Granatum. (*Punica Granatum, Linn.*) N.O. Myrtaceæ. Pomegranate. Habitat, Asia, Northern Africa, Southern Europe, and tropical America. *Preparation.*—Tincture of the bark of the root as imported, using proof spirit, Process I. *Dispensing forms.*— ϕ and upwards, tincture, tincture-trituration, pilules, or globules. Am.H.P.—Tincture of the dried root-bark, Class I.

GRAPHITES. Blacklead, Plumbago, Graphite. A mineral carbon, containing a small, indefinite quantity of iron. In the proving Hahnemann used a trituration made from the prepared blacklead in the finest English drawing-pencils. This, therefore, is the source from which the substance should be obtained. *Preparation.*—Trituration. *Dispensing forms.*—1 \times to 3, trituration only; 4 and upwards, tincture, tincture-trituration, pilules, or globules. Am.H.P.—Trituration, Class VII.

Gratiola Officinalis. N.O. Scrophulariaceæ. Hedge Hyssop. A perennial plant found in wet situations in the south of Europe, and having a very acrid, bitter taste. *Preparation.*—Tincture of the entire plant, proof spirit. Am.H.P.—Tincture of the fresh plant, Class I.

Grindelia Robusta and **G. Squarrosa.** N.O. Compositæ. Rosin Weed. Abundant in California. Parts employed, the leaves and unexpanded flower-heads. *Preparation.*—Tincture, using rectified spirit. Highly recommended for asthma. Am.H.P.—Tincture of the fresh herb in flower, Class III.

Guaco. (*Mikania Guaco.*) N.O. Compositæ. This is a climbing plant found in intertropical America; it has been introduced into the West Indies. It is used as an antidote for the bite of venomous snakes. The natives apply the bruised leaves and expressed juice to the bite, and at the same time drink the infusion. Parts employed, the fresh herb. *Preparation.*—Tincture, which should be imported, as the plant loses its virtues in drying. Am.H.P.—Tincture of the fresh leaves, Class III.

- Guaiacum.** (*Guaiacum Officinale, Linn.*) N.O. Zygophyllaceæ. *Syn.* *Lignum vitæ, Lignum sanctum.* *Guaiacum.* Resin of the B.P. Habitat, West Indies and South America. B.P. dose, 10 to 30 grains. Particularly useful for rheumatic pains that are worse by day. *Homœopathic preparation.*—Tincture of the gum-resin, using rectified spirit, Process III. *Dispensing forms.*— ϕ and upwards. tincture, tincture-trituration, pilules, or globules. Am.H.P.—Solution of the resin in alcohol, Class VI. *a.*
- Guarana.** (Ad.) N.O. Sapindaceæ. *Syn.* *Paullinia sorbilis.* Brazilian Cocoa. Habitat, northern and western provinces of Brazil. Am.H.P.—Tincture of the dried paste made from the seeds, Class IV.
- Guarea Trichilioides.** N.O. Meliaceæ. *Syn.* *Melia guara.* Ball Wood, Bois à balle, Bois rouge (Cayenne). Habitat, the Antilles. *Preparation.*—Tincture of the bark, proof spirit. Am.H.P.—Tincture of the bark, Class IV.
- Gummi Gutti.** See GAMBOGIA.
- Gymnocladus Canadensis.** N.O. Leguminosæ. American Coffee Tree. Part employed, the pulp surrounding the seeds. *Preparation.*—Tincture. Am.H.P.—Tincture of the fresh pulp of the fruit, Class III.
- Hæmatoxylon Campeachianum.** N.O. Leguminosæ. *Syn.* *Hæmatoxyli lignum.* Logwood of the B.P., where see characters. Native of Campeachy and the West Indies. *Preparation.*—Tincture of the heart-wood, using proof spirit. Am.H.P.—Tincture of the fine chips, Class IV.
- Hamamelin.** The resinoid obtained from *Hamamelis Virginica.* *Preparation.*—Trituration.
- Hamamelis Virginica.** N.O. Hamamelidaceæ. *Syn.* *H. macrophylla, H. dioica.* Witch Hazel. Habitat, Canada to Louisiana. Part employed, the bark. *Preparation.*—Tincture corresponding in alcoholic strength with proof spirit, Process I. *Dispensing forms.*— ϕ and upwards, tincture, tincture-trituration, pilules, or globules. Cerate made by mixing 1 fluid drachm of the ϕ tincture with 1 ounce of simple cerate. Am.H.P.—Tincture of the fresh bark of the twigs and root, Class III.
- Heclæ Lava.** The lava obtained from Mount Hecla,

Iceland. *Preparation*.—Trituration. Am.H.P.—Trituration, Class VII.

Hedeoma Pulegioides. (Ad.) N.O. Labiatae. American Pennyroyal, Squaw Mint, Tick Weed. Habitat, United States. Am.H.P.—Tincture of the fresh plant, Class III.

Hedysarum Ildefonsianum. N.O. Leguminosae. Carapicho. Habitat, Brazil. *Preparation*.—Tincture of the leaves. Am.H.P.—Tincture of the dried leaves, Class IV.

Helianthus Annuus. N.O. Compositae. *Syn.* H. platycephalus. Common Sunflower. Habitat, Peru. Cultivated in gardens. Parts employed, the mature flower-heads. *Preparation*.—Tincture, proof spirit. Am.H.P.—Tincture of the ripe seeds, Class IV.

Heliotropium Peruvianum. N.O. Ehretiaceae. Sweet Garden Heliotrope. Parts employed, the entire fresh herb. *Preparation*.—Tincture, dilute alcohol. Average loss of moisture, 80 per cent.

Helleborus. (Helleborus Niger, Linn.) N.O. Ranunculaceae. Black Hellebore, Christmas Rose. Habitat, lower mountains of Central Europe; cultivated as a flower in our gardens. Flowering time, December to March. Part employed, the fresh root. Time for collecting, Christmas, just before flowering. *Preparation*.—Tincture, corresponding in alcoholic strength with proof spirit. *Dispensing forms*.— ϕ and upwards, tincture, tincture-trituration, pilules, or globules. Average loss of moisture, 60 per cent. Am.H.P.—Tincture of the dried root, Class IV.

Helleborus Foetidus. N.O. Ranunculaceae. Stinking Hellebore, Bear's Foot. Habitat, Southern and Central Europe, parts of England. *Preparation*.—Tincture of the fresh root.

Helonias Dioica. N.O. Melanthaceae. *Syn.* Melanthium dioicum, Veratrum luteum (Linn.), Chamælorium luteum. False Unicorn, Blazing Star. Habitat, United States. N.B.—The plant is sometimes confounded with Aletris farinosa. Part employed, the root, at the commencement of flowering, and when the leaves are dying down. *Preparation*.—Tincture corresponding in alcoholic strength with proof spirit, Process I. *Dispensing forms*.— ϕ and

upwards, tincture, tincture-trituration, pilules, or globules. Am.H.P.—Tincture of the fresh root, Class III.

Helonin. The resinoid obtained from *Helonias dioica*.
Preparation.—Trituration.

Hepar Sulphuris. (Impure Calcic Sulphide, CaS.) *Syn.* Hepar sulphuris calcareum. Sulphuret of Lime, Liver of Sulphur. This must be prepared according to Hahnemann's directions—viz., by mixing equal weights of finely-powdered clean oyster-shells and pure flowers of sulphur, placing them in a hermetically-closed clay crucible, and keeping the mixture at a white heat for at least ten minutes. When cold, open the crucible, and preserve the hepar in amber glass-stoppered bottles. N.B.—May be obtained from the manufacturing homœopathic chemist. The pure calcic sulphide should not be used. *Preparation.*—Trituration. The names "Hepar Sulphuris" and "Liver of Sulphur" are also applied to the Sulphuret of Potassium of the Dublin Pharmacopœia. *Dispensing forms.*—1x to 3, trituration only; 4 and upwards, tincture, tincture-trituration, pilules, or globules. Am.H.P.—Trituration, Class VII.

Hepar Sulphuris Kalinum. (Ad.) *Syn.* Kalium sulphuratum, Potassii sulphuratum. Sulphurated Potash, Liver of Sulphur, Sulphuret of Potassium. Am.H.P.—Trituration, Class VII.

Hepatica Americana. (Ad.) N.O. Ranunculaceæ. *Syn.* Hepatica triloba, Anemone hepatica. Liverwort. Found nearly all over the world. Am.H.P.—Tincture of the fresh leaves, Class III.

Heracleum Spondylium. N.O. Umbelliferae. *Syn.* Branca ursina. Cow Parsnip, Hog Weed, False Bear's-breech. *Preparation.*—Tincture of the fresh root, proof spirit. Am.H.P.—Tincture of the fresh plant, Class I.

Homœopathic Chocolate. (Ad.) There are various forms. The following was used at Headland's Homœopathic Pharmacy, where the homœopathic cocoa was first introduced:—Pure cocoa, 60; finely powdered loaf sugar, 32. Mix.

Homœopathic Cocoa. (Ad.) Made by mixing together pure cocoa, arrowroot and sugar, in various proportions.

Concentrated cocoas are now more generally used. These consist of pure cocoa with about a third of the fat extracted.

Homœopathic Tooth Powder. (Ad.) A name given to almost any simple unmedicated dentifrice. The following is a very usual formula :—Powdered sugar of milk, $2\frac{1}{2}$ ozs. ; powdered cuttle fish, $3\frac{1}{2}$ ozs. ; powdered rice, 5 ozs. ; rub together, and pass through a moderately fine sieve. No perfume should be added.

Hura Braziliensis. (Ad.) N.O. Rutaceæ. Common names (in Brazil), Assacu, Oassucu. Habitat, the equatorial regions of South America. Am.H.P.—The fresh sap, obtained by boring the trunk of the tree, is mixed with an equal part by weight of alcohol, Class I.

Hydrastis Canadensis. N.O. Ranunculaceæ. *Syn.* Warneria Canadensis. Golden Seal, Yellow Root. Habitat, Canada to Carolina, Ohio and Kentucky. Part employed, the root. *Preparations.*—Tincture, corresponding in alcoholic strength with proof spirit, Process I. ; infusion. *Dispensing forms.*— ϕ and upwards, tincture, tincture-trituration, pilules, or globules. *Additional preparation.*—Tincture of the imported dry root. Am.H.P.—Tincture of the fresh root, Class III.

Hydrocotyle Asiatica. N.O. Umbelliferæ. Thick-leaved Pennywort, Bevilacqua. Habitat, moist grounds in India, central and southern Africa, and islands of the Indian Ocean. It has been used in lepra, eczema, and some other skin diseases. Parts employed, the whole plant. *Preparation.*—Tincture, proof spirit. Am.H.P.—Tincture of the dried plant, Class IV.

Hydrogenii Peroxidum. (H_2O_2 .) Hydrogen Peroxide, Peroxide of Hydrogen. Recommended in whooping-cough in doses of 60 minims of the 10 vol. solution or less.

Hydrophyllum Virginicum. (Ad.) N.O. Hydrophyllaceæ. Common names, Burr Flower, Waterleaf. Habitat, America. Used in catarrhal inflammation of the eyes. Am.H.P.—Tincture of the fresh plant in bloom, Class III.

Hydropiper. See POLYGONUM PUNCTATUM.

Hyoscyamus. (Hyoscyamus Niger.) N.O. Solanaceæ.

Syn. *H. vulgaris*, *H. lethalis*, *H. flavus*. Henbane, Hogbean. Habitat, waste and stony places in central and southern Europe; in Britain, chiefly on rubbish about villages and old castles. Flowers in summer. Part employed, the herbaceous part of the biennial plant, when about two-thirds of the flowers are expanded. *Preparation*.—Tincture, corresponding in alcoholic strength with dilute alcohol, Process I. *Dispensing forms*.— ϕ and upwards, tincture, tincture-trituration, pilules, or globules. Average loss of moisture, 82 per cent. Am.H.P.—Tincture of the fresh blooming plant, Class I.

Hypericum. (*Hypericum Perforatum*.) N.O. Hypericaceæ.

Syn. *H. perforiatum*, *Fuga dæmonum*, *Herba umbelicalis*. St. John's Wort. Habitat, Europe, Central and Russian Asia; abundant in Britain. Flowers in summer and autumn. Parts employed, the entire fresh plant, when in flower and seed. *Characters*.—"Root-stock perennial, with short runners; stem erect, 1 to 1½ foot high, branching in upper part, cylindrical, or with two slightly prominent opposite angles, quite glabrous; leaves sessile, oblong, marked with pellucid dots, and occasionally a few black ones on the under side; flowers bright yellow, in a handsome terminal corymb; sepals lanceolate, pointed, quite entire, with a few glandular lines or dots; petals twice as long, marked with black dots; stamens numerous, shortly united into three bundles; styles three" (B.H.P.). *Preparation*.—Tincture, corresponding in alcoholic strength with proof spirit, Process I. *Dispensing forms*.— ϕ and upwards, tincture, tincture-trituration, pilules, or globules. Average loss of moisture, 59 per cent. Am.H.P.—Tincture of the fresh blooming plant, Class III.

Iberis Amara. N.O. Cruciferæ. Bitter Candytuft. Habitat, found in various parts of Europe. It is cultivated in gardens on account of its bright, milk-white flowers, and appears occasionally in corn-fields in England. *Preparation*.—Tincture of the seeds, using proof spirit. Am.H.P.—Tincture of the ripe seeds, Class IV.

Ignatia. (*Ignatia Amara*.) N.O. Loganiaceæ. *Syn.* *Faba*

sancti Ignatii, Strychnos Ignatia, Faba indica. St. Ignatius's Bean. Habitat, East Indies and the Philippine Islands. Parts employed, the seeds, as imported. *Preparations.*—Tincture, using 20 O.P. spirit, Process I.; trituration. N.B.—As the hard, horny nature of the seed renders it extremely difficult to pulverize in a mortar, it should be first coarsely ground in a suitable mill. *Dispensing forms.*—1x to 3, trituration; or ϕ and upwards, tincture, tincture-trituration, pilules, or globules. N.B.—The seeds of Ignatia yield a larger proportion of strychnia than nux vomica, and are consequently used as a source of that alkaloid. Am.H.P.—Tincture of the seeds, Class IV.; trituration, Class VII.

Ilex Aquifolium. (Ad.) N.O. Aquifoliaceæ. European Holly. Found in Southern States of America, and in Europe. *Preparation.*—Tincture of the leaves and berries.

Ilex Opaca. (Ad.) N.O. Aquifoliaceæ. *Syn.* Ageria opaca. American Holly. Habitat, America. Am.H.P.—Tincture of the fresh leaves, Class III.

Indigo. (Indigofera.) N.O. Leguminosæ. Indigo. Habitat, East Indies, middle regions of America, and tropical Africa. Parts employed, a peculiar dye stuff obtained by oxidation of an infusion of the leaves and stems of several species, especially *tinctoria*. *Characters.*—"The imported indigo, if good, has the following characters: a dark blue colour, passing into violet-purple, void of taste and smell, but by rubbing with a smooth, hard substance, it assumes the lustre and hue of copper or bronze; it floats in water; when burned it leaves very little residue. Soluble in sulphuric acid, forming a deep blue solution; insoluble in water or ether. Its colour is not changed by alkalis" (B.H.P.). *Preparation.*—Trituration. *Dispensing forms.*—1x to 3, trituration only; 4 and upwards, tincture, tincture-trituration, pilules, or globules. Am.H.P.—Trituration, Class VII.

Indium Metallicum. (Ad.) (Metallic Indium, In.) Am.H.P.—Trituration, Class VII.

Infusa. (Infusions.) "Not generally recognized, but are occasionally ordered. Many plants yield their virtues more fully to water than to alcohol or any other menstruum.

There is, however, a great practical difficulty as regards these preparations, and that is, they will not keep; and accordingly it is still a desideratum that some method should be devised whereby they can be preserved from decomposition. It is probable that the addition of a certain proportion of alcohol will effect this, and the subject is suggested as a very suitable one for experiment. In the meantime, these preparations must be made fresh when required. They are prepared as follows:—1. *Cold Infusions*.—Reduce the drug to a coarse powder, pack it in a percolator, precisely as directed for tincture making; then let 10 fluid ounces of distilled water for every 1 ounce of dry material be passed through the percolator in the ordinary way. 2. *Hot Infusions*.—Prepare the medicinal substance as above, and tie it loosely in a bag of clear, well-washed book muslin, and then pour 10 fluid ounces of boiling distilled water for every 1 ounce of dry material into an infusion pot; place the bag containing the substance on the diaphragm, cover over the vessel, and keep it in a warm place for an hour, when the fluid may be poured off, and that retained in the bag squeezed out, and the two mixed together and filtered. If attenuations of infusions are required, they must be made as soon as the preparations are ready, pure distilled water being used for the 1st decimal and centesimal attenuations, dilute alcohol for the 3rd decimal, and rectified spirit for the second centesimal and upwards" (B.H.P.)

Injections. 1st. *Vaginal Injections* (formula recommended by Dr. Ludlum).—Take of the medicine, $\frac{1}{2}$ fluid ounce; glycerine, $1\frac{1}{2}$ fluid ounce; distilled water, 2 fluid ounces. Mix. One teaspoonful of this, with sufficient tepid water, is used for each injection. 2nd. *Urethral Injections*.—Infusion of hydrastis, 1 ounce to the pint; but solutions of the various salts in distilled water are mostly used of strengths similar to those of the old school. 3rd. *Rectal Injections*.—It is convenient to mix the quantity of medicine desired to be administered with about 2 fluid ounces of thin starch or arrowroot, and to inject it slowly, so that it may be retained.

Inula. (Ad.) N.O. Corymbiferae. *Syn.* Inula Helenium.

Elecampane, Scabwort. Habitat, Europe, Central Asia and United States. Am.H.P.—Tincture of the fresh root, Class III.

Iodium. (Iodine, I.) *Syn.* Iodum, Iodinium. A non-metallic element, obtained from the ashes of sea-weeds, and from mineral iodides and iodates. For characters and tests, *see* B.P. *Solubility.*—1 in 700 of water; 1 in 12 (1 in 10?) of rectified spirit; 1 in 65 of glycerine. *Preparation.*—Solution in rectified spirit forming the 1x attenuation, ϕ signifying the crude substance. *Dispensing forms.*—1x, tincture only; 1 and upwards, tincture, pilules, or globules. Am.H.P.—Solution in alcohol, Class VI. *b.*; trituration, Class VII.

Iodoformum. (Ad.) (Iodoform, CHI_3 .) Soluble in 120 parts of rectified spirit. Am.H.P.—Trituration, Class VII.

Ipecacuanha. (Cephaëlis Ipecacuanha.) N.O. Rubiaceæ. *Syn.* Callicocca ipecacuanha, Ipecacuanha fusca, Psychotria ipecacuanha. Ipecacuanha. B.P. dose—as an expectorant, $\frac{1}{2}$ to 2 grains; as an emetic, 15 to 30 grains. Part employed, the root. For characters, *see* B.P. *Preparations.*—Tincture, using 20 O.P. spirit, Process I.; trituration. *Dispensing forms.*— ϕ and upwards, tincture, tincture-trituration, pilules, or globules; or 1x to 3, trituration. Am.H.P.—Tincture of the dried root, Class VI.

Iridin. (Ad.) A powerful hepatic alkaloid found in the Iris versicolor. *Preparation.*—Trituration.

Iridium. (Ir.) A rare metal, found in the Uralian ores of Platinum. *Preparation.*—Trituration. Am.H.P.—Trituration, Class VII.

Iris Versicolor. N.O. Iridaceæ. *Syn.* Iris hexagona. Blue Flag. Habitat, United States. Part employed, the fresh root. Time for collecting, late autumn or early spring. *Preparations.*—Tincture, corresponding in alcoholic strength with dilute alcohol, prepared in, and imported from, North America; trituration of the resinoid known as Irisin. *Dispensing forms.*— ϕ and upwards, tincture, tincture-trituration, pilules, or globules. Irisin.—1x to 3, trituration. Am.H.P.—Tincture of the fresh root, Class III.

Jaborandi. (*Pilocarpus Pennatifolius.*) N.O. Rutaceæ.

A shrub found in Brazil, which, in common with others of the same genus, is known as Jaborandi or Jamborandi. Parts employed, the leaves. *Preparation.*—Tincture, using proof spirit. Am.H.P.—Tincture of the dried leaves and stems, Class IV.

Jacaranda Caroba. (Ad.) N.O. Bignoniaceæ. *Syn.* *Bignonia caroba*, *Jacaranda Braziliensis*. Caroba. Habitat, Brazil. Am.H.P.—Tincture of the fresh flowers, Class III.

Jalapa. (*Exogonium Purga.*) N.O. Convolvulaceæ. *Syn.* *Ipomoea purga*, *I. jalapa*. Common jalap of the B.P. This plant is a native of Mexico. Parts employed, the dried tubercles of the root imported from Vera Cruz. B.P. dose, 10 to 30 grains. *Homœopathic preparation.*—Tincture, using rectified spirit. Am.H.P.—Tincture of the dried root, Class IV.

Janipha Manihot. (Ad.) N.O. Euphorbiaceæ. *Syn.* Cassada, *Jatropha manihot*, *Manihot utilisissima*, *Manioca mandi*. Tapioca Plant, *Manioca*, Cassava. Habitat, Brazil. Am.H.P.—Trituration of the milky juice, Class VIII.

Jatropha Curcas. N.O. Euphorbiaceæ. *Syn.* *J. purgans*, *Curcas purgans*. Physic Nut, Purgine Nut, Barbadoes Nut. Habitat, Brazil, the West Indies, and the West Coast of Africa. Parts employed, the seeds. *Preparation.*—Trituration; tincture, using absolute alcohol. Am.H.P.—Tincture of the ripe seeds, Class IV.

Juglans Cinerea. N.O. Juglandaceæ. Butter Nut, Oil Nut, White Walnut. Indigenous to the United States and Canada. Part employed, the inner bark, especially of the root. *Preparation.*—Tincture, proof spirit. Am.H.P.—Tincture of the fresh young inner bark (especially of the root), Class III.

Juglans Regia. See NUX JUGLANS.

Juncus Effusus. (*Juncus Communis*, *Linn.*) N.O. Juncaceæ. Common Rush. *Preparation.*—Tincture of the fresh root, dilute alcohol. Am.H.P.—Tincture of the fresh root, Class III.

Juncus Pilosus. (Ad.) N.O. Juncaceæ. *Syn.* *Luzula pilosa*. Wood Rush. Habitat, Europe, Asia, Africa and North America. Am.H.P.—Tincture of the fresh root, Class III.

Juniperus Communis. (Ad.) N.O. Coniferæ. Common Juniper. Habitat, Europe. It acts on the urinary organs. Am.H.P.—Tincture of the fresh ripe berries, Class III.

Kali Aceticum. (Normal Potassic Acetate, $KC_2H_3O_2$.) *Syn.* *Kali acetat.* Acetate of Potassium of the B.P. *Preparation.*—Solution in distilled water for 1x, using dilute alcohol for 1, and rectified spirit for all above. Solubility, 2 in 1 of water, 1 in 1 of proof spirit, 1 in 2 of rectified spirit. B.P. dose, 10 to 60 grains. Am.H.P.—Solution in distilled water, Class V. *a*.

Kali Arsenicosum. (Ad.) (HK_2AsO_3 .) *Syn.* *Kali arseniatum*. Potassium Arsenite. Am.H.P.—Solution in distilled water, Class V.

Kali Bichromicum. (Potassic Dichromate, $K_2Cr_2O_7$.) *Syn.* *Potassæ bichromas*. The well-known Bichromate of Potash used in dyeing. It may be purified by dissolving in hot distilled water and allowing it to crystallize. For characters and tests, *see* B.P. *Preparations.*—Solution in distilled water, 1 in 20; trituration. The 1 attenuation is made with distilled water, 3x to 3 with distilled water to which 5 per cent. of rectified spirit has been added, 7x and 4 with dilute alcohol, and all above with rectified spirit. N.B.—The liquid attenuations should not be made from the triturations, as a partial decomposition takes place after some time. *Dispensing forms.*—1x to 3, trituration; or 1 in 20 to 3, solution; 4, dilute tincture only; 5 and upwards, tincture, tincture-trituration, pilules, or globules. Solubility, 1 in 10 of water (*Squire*). Am.H.P.—Solution in distilled water, Class V. *b*; trituration, Class VII.

Kali Bromatum. (Potassic Bromide, KBr .) *Syn.* *Potassii bromidum*. Bromide of Potassium. For characters and tests, *see* B.P. It should be kept in a well-stoppered bottle. *Preparation.*—Solution in distilled water for 1x, using

rectified spirit for 1 and upwards. *Dispensing forms.*—1*x*, solution only; 1 and upwards, tincture, pilules, or globules. Solubility, 1 in 2 of water, 1 in 95 of rectified spirit. B.P. dose, 5 to 30 grains. Am.H.P.—Solution in distilled water, Class V. *b.*; trituration, Class VII.

Kali Carbonicum. (Potassic Carbonate, K_2CO_3 .) *Syn.* Potassii carbonas. Salt of Tartar, Salt of Wormwood, Carbonate of Potassium. For characters and tests *see* B.P. *Preparations.*—Solution in distilled water for 1*x*; trituration. Distilled water to which 5 per cent. of rectified spirit has been added is used for 1, 3*x* is prepared with proof spirit, 2 with 20 o.p., and all above with rectified spirit. *Dispensing forms.*—1*x* to 1, solution; or 1*x* to 3, trituration; 3*x* and upwards, tincture, tincture-trituration, pilules, or globules. Solubility, 4 in 3 of water; insoluble in spirit. B.P. dose, 10 to 30 grains. Am.H.P.—Solution in distilled water, Class V. *a.*; trituration, Class VII.

Kali Causticum. (Potassium Hydroxide, or Hydrate KHO.) *Syn.* Liquor potassæ. A solution of Caustic Potash in distilled water, containing 27 grains in each fluid ounce, and answering to the B.P. tests. This preparation has been recommended by Dr. Black as a substitute for Causticum. *Preparation.*—2 fluid drachms mixed with 9 fluid drachms of distilled water will form the 1 attenuation, from which the others can be prepared with rectified spirit. B.P. dose, 15 to 60 minims. Am.H.P.—Solution of the pure caustic potassa in distilled water, Class V. *a.*

Kali Chloricum. (Potassic Chlorate, $KClO_3$.) *Syn.* Potassii chloras, Potassæ chloras. Chlorate of Potash, Chlorate of Potassium. For characters and tests *see* B.P. *Preparations.*—Trituration; solution in distilled water 1 in 20, using distilled water to which 5 per cent. of rectified spirit has been added for 1, dilute alcohol for 3*x*, and rectified spirit for all above. *Dispensing forms.*—1*x* to 3, trituration; or 1 in 20 and 1 solution; 3*x* and upwards, tincture, tincture-trituration, pilules or globules. Solubility, 1 in 16 of water, 1 in 2 of boiling water. B.P. dose, 10 to 30 H.P.

grains. Am.H.P.—Solution in distilled water, Class V. *b* ; trituration, Class VII.

Kali Chloridum. *See* KALI MURIATICUM.

Kali Chromicum. (Normal Potassic Chromate, K_2CrO_4 .)

Syn. Kali chromas. Neutral, or Yellow Chromate of Potash.

Preparation.—Trituration.

Kali Citricum. (Potassic Citrate, $K_2C_6H_5O_7$.) *Syn.* Kali citras, Potassæ citras. Citrate of Potash of the B.P., where *see* characters and tests. *Preparations.*—Solution in distilled water for 1*x*, using distilled water to which 5 per cent. of rectified spirit has been added for 1, dilute alcohol for 3*x*, and rectified spirit for all above; trituration. Solubility, 10 in 6 of water, 1 in 2 of glycerine. B.P. dose, 20 to 60 grains.

Kali Cyanatum. (Potassic Cyanide, KCN.) *Syn.* Kali cyanidum, Kali cyanuretum, Potassii cyanidum. Fused Cyanide of Potassium of the B.P. *Preparation.*—Solution in distilled water for 1*x*, using distilled water to which 5 per cent. of rectified spirit has been added for 1, dilute alcohol for 3*x*, and rectified spirit for all above. N.B.—Cyanide of potassium and its attenuations should be freshly prepared. It is a powerful poison. It is freely soluble in water, and sparingly in alcohol. Am.H.P.—Trituration, Class VII.

Kali Ferrocyanatum. (Potassic Ferrocyanide, $K_4Fe(CN)_6 \cdot 3H_2O$.) *Syn.* Kali ferrocyanidum, Kali ferrocyanuretum, Potassæ Prussias flava. Yellow Prussiate of Potash of the B.P. *Preparations.*—Trituration; solution in distilled water for 1*x*, using distilled water to which 5 per cent. of rectified spirit has been added for 1 and 3*x*, dilute alcohol for 2 and 5*x*, and rectified spirit for all above. Used to prepare acidum hydrocyanicum dilutum. Solubility, 1 in 4 of water. Recommended in uterine diseases. Callies, as quoted by Pereira, found the commercial salt slightly poisonous, but the pure salt unproductive of harm, even in large doses. Am.H.P.—Trituration, Class VII.

Kali Hypermanganicum. (Potassic Permanganate, $KMnO_4$.) *Syn.* Kali permanganas. Permanganate of Potassium of the B.P. *Preparation.*—Solution in distilled

water for 1*x* and 1, using distilled water to which 5 per cent. of rectified spirit has been added for 3*x* and 2, dilute alcohol for 5*x* and 3, and rectified spirit for all above. These attenuations must be freshly made. Solubility, 1 in 18 of water. B.P. dose, 1 to 5 grains. Am.H.P.—Solution in distilled water, Class V. *b*.

Kali Hypophosphorosum. (Ad.) (KPH_2O_2) *Syn.* Potassii hypophosphis. Hypophosphite of Potassium. Am. H.P.—Solution in distilled water, Class V. *a*; trituration, Class VII.

Kali Iodatum. (Potassic Iodide, KI.) *Syn.* Potassii iodidum (B.P.), Kali hydriodicum. Iodide of Potassium. For characters and tests *see* B.P. It should be kept in a well-stoppered bottle. *Preparation.*—Solution in dilute alcohol for 1*x*, using rectified spirit for 1 and upwards. *Dispensing forms.*—1*x*, solution only; 1 and upwards. tincture, pilules, or globules. Solubility, 4 in 3 of water, 1 in 10 of rectified spirit. B.P. dose, 2 to 20 grains. Am.H.P.—Solution in alcohol, Class V. *b*; trituration, Class VII.

Kali Muriatricum. (Potassic Chloride, KCl.) *Syn.* Kali chloridum. Prepared by neutralizing hydrochloric acid with carbonate of potash, and evaporating. *Preparations.*—Trituration; solution in distilled water for 1*x*, using dilute alcohol for 1, and rectified spirit for all above. Am.H.P.—Trituration, Class VII.

Kali Nitricum. (Potassic Nitrate, KNO_3 .) *Syn.* Nitrum, Potassæ nitras. Nitre, Saltpetre, or Nitrate of Potassium. The commercial salt, purified by solution in distilled water and re-crystallization. For characters and tests *see* B.P. *Preparations.*—Trituration; solution in distilled water for 1*x*, using dilute alcohol for 1, and rectified spirit for 3*x* and upwards. *Dispensing forms.*—1*x* to 3, trituration; or 1*x*, solution; 1 and upwards, tincture, tincture-trituration, pilules, or globules. Solubility, 1 in 4 of cold water. B.P. dose, 10 to 30 grains. Am.H.P.—Solution in distilled water, Class V. *a*; trituration, Class VII.

Kali Oxalicum. (Hydric Potassic Oxalate, $\text{KHC}_2\text{O}_4 \cdot 2\text{H}_2\text{O}$.) *Syn.* Kali oxalas. Binoxalate of Potash, Salt of Lemons, Salt of Sorrel. *Preparations.*—Trituration; solu-

tion in distilled water for 1, using dilute alcohol for 3x, and rectified spirit for all above.

Kali Permanganas. See KALI HYPERMANGANICUM.

Kali Phosphoricum. (Ad.) (K_2HPO_4 .) *Syn.* Potassii phosphas. Phosphate of Potassium. Am.H.P.—Trituration, Class VII.

Kali Sulphuricum. (Normal Potassic Sulphate, K_2SO_4 .) *Syn.* Kali sulphas. Sulphate of Potassium re-crystallized. For characters and tests, see B.P. *Preparations.*—Trituration; solution in distilled water for 1x, using distilled water to which 5 per cent. of rectified spirit has been added for 1 and 3x, dilute alcohol for 2 and 5x, and rectified spirit for all above. Solubility, 1 in 10 of cold water; insoluble in spirit. B.P. dose, 15 to 60 grains. Am.H.P.—Trituration, Class VII.

Kali Tartaricum. (Normal Potassic Tartrate, $K_2C_4H_4O_6 \cdot H_2O$.) *Syn.* Kali tartaras. Tartrate of Potassium. For characters and tests, see B.P. *Preparations.*—Trituration; solution in distilled water for 1x, using distilled water to which 5 per cent. of rectified spirit has been added for 1, dilute alcohol for 3x, and rectified spirit for all above. Solubility, 10 in 6 of water; insoluble in rectified spirit. B.P. dose, 60 grains to $\frac{1}{2}$ ounce.

Kalmia. (*Kalmia latifolia*.) N.O. Ericaceæ. *Syn.* Camædaphne foliis tini, Ledum floribus bullatis, Cistus chamærhododendros. Mountain Laurel, Lambkill, Spoonwood, Calico Bush. Habitat, New Hampshire, Massachusetts: Alleghany mountains. Flowering time, spring months. Parts employed, the leaves. Time for collecting, while in flower. *Preparation.*—Tincture, corresponding in alcoholic strength with proof spirit, Process I. Imported from America. *Dispensing forms.*— ϕ and upwards, tincture, tincture-trituration, pilules, or globules. Am.H.P.—Tincture of the fresh leaves, Class III.

Kamala. (Ad.) N.O. Euphorbiaceæ. *Syn.* Croton coccineus, Mallotus Phillipinensis, Rottlera tinctoria, Kameela. Habitat, Hindostan. Am.H.P.—Tincture of the powder, Class IV.; trituration, Class VII.

Kaolin. (Ad.) *Syn.* Alumina silicata. Porcelain, or China Clay. Am.H.P.—Trituration, Class VII.

- Kino.** (Ad.) N.O. Leguminosæ. *Syn.* *Butea frondosa*, *Erythrina monosperma*, *Pterocarpus marsupium*. Habitat, India and Ceylon. Am.H.P.—Tincture of the inspissated juice, Class IV.
- Kissingen.** The well-known simple muriated mineral water (the Ragozi spring) has been proved.
- Krameria.** (Ad.) N.O. Polygalæ. *Syn.* *Krameria triandra*. Rhatany. Habitat, Peru. Am.H.P.—Tincture of the dried root, Class IV.
- Kreasotum.** *Syn.* *Creasotum*. *Kreasote*, or *Creasote*. The exact composition of this is unknown. A product obtained by the distillation of wood tar. For characters and tests, *see* B.P. *Preparation.*—Solution in rectified spirit, forming the 1*x* attenuation. *Dispensing forms.*—1*x* and upwards, tincture, pilules, or globules. B.P. dose, 1 to 3 drops. Am.H.P.—Solution in alcohol, Class VI. *b*.
- Lacerta Agilis.** (Ad.) *Syn.* *Lacerta stirpium*. Green European Lizard. Habitat, Southern Europe, some parts of Africa, and in Sweden. Am.H.P.—Trituration of the entire dried animal, Class VII.
- Lachesis.** (*Trigonocephalus Lachesis*?) Lance-headed viper? Part employed, the venom. "The specimen used by Dr. Constantine Hering in his experiments was obtained from the living snake, which was stunned with a blow; the poison was then collected on sugar by pressing the poison fang upwards against the bag; and this is, up to the present time, the only reliable source. In seeking a fresh supply it might be secured in the manner described under *CROTALUS*. Its lowest attenuations should be tested upon some small animals, and if its subcutaneous injection did not produce distinct symptoms of poisoning it should be rejected as untrustworthy." *Characters.*—"Much difficulty exists in identifying the exact species referred to by Hering. Büchner mentions three species—viz., *Trigonocephalus lachesis*, *T. atrox*, and *T. lanceolatus*. The habitation, however (South America), and the general description agree best with the *Lachesis mutus*, or *Curucucu*, while the name, lance-headed viper, would refer it to the *Craspedo-*

cephalus lanceolatus, or fer-de-lance, a well-known and extremely poisonous snake of the Brazils. For every reason, therefore, it is desirable to use Hering's original preparation, with which the provings were made" (B.H.P.).

Preparations.—Attenuations made from the original supply with rectified spirit; solution in glycerine, and subsequent attenuation in the same manner as CROTALUS, should a fresh supply be obtained. *Dispensing forms*.—6 or upwards, tincture, pilules, or globules, until a fresh supply can be obtained. Am.H.P.—Tincture of the virus, Class VIII.

Lachnanthes Tinctoria. N.O. Hæmodoraceæ. Spirit Weed, Red Root. Habitat, swampy places, southward, near the coast, in the United States; has also been seen in Rhode Island and New Jersey. *Preparation*.—Tincture of the fresh plant. Am.H.P.—Tincture of the fresh plant, Class III.

Lactuca. (*Lactuca Virosa*.) N.O. Compositæ. Strong-scented Lettuce. Habitat, banks and waysides, especially on a chalky soil; common in England. Flowering time, June to August. Parts employed, the entire fresh plant. *Characters*.—"A biennial herb, full of acrid, milky juice; stem 2 to 4 feet high, erect, round, branched above, paniced; leaves horizontal, oblong, auricled, and clasping, prickly on the keel, mucronate-dentate or sinuate; flowers yellow; heads scattered; bracts cordate, acute; fruit striated, beak about as long as the black fruit" (B.H.P.). Time for collecting, when in flower. *Preparation*.—Tincture corresponding in alcoholic strength with proof spirit, Process I. *Dispensing forms*.— ϕ and upwards, tincture, tincture-trituration, pilules or globules. Average loss of moisture, 74 per cent. Am.H.P.—Tincture of the fresh plant, Class I.

Lactuca Sativa. N.O. Compositæ. The cultivated Lettuce. Parts employed, the fresh flowering plant. *Preparation*.—Tincture, dilute alcohol. Am.H.P.—Tincture of the fresh plant, Class I.

Lactucarium. (Ad.) The dried milk-juice of *Lactuca sativa* and *L. virosa*, collected and prepared in Germany and Great Britain. Am.H.P.—Trituration, Class VII.

LAMIUM. (*Lamium Album.*) N.O. Labiatæ. *Syn.* L. vulgatum, L. lævigatum, L. maculatum. Dead Nettle. Habitat, borders of fields and waste places throughout Europe and Russian Asia; abundant. Flowering time, spring and summer. Parts employed, the fresh herb. *Characters.*—"Leaves cordate, acuminate, deeply serrate, stalked; calycine teeth long, subulate, always spreading; corolla with tube curved upwards, having within a hairy ring, the throat dilated, upper lip oblong, lateral lobes of lower lip with one to three subulate teeth" (B.H.P.). Time for collecting, while in flower and seed. *Preparation.*—Tincture, corresponding in alcoholic strength with proof spirit, Process I. *Dispensing forms.*— ϕ and upwards, tincture, tincture-trituration, pilules, or globules. Am.H.P.—Tincture of the fresh leaves and blossoms, Class I.

Lapathum Acutum. (Ad.) N.O. Polygonacæ. *Syn.* Rumex obtusifolius. Bitter Dock. Habitat, Europe and America. Am.H.P.—Tincture of the fresh root, Class III.

Lapis Albus. The name Lapis albus has been given to a species of gneiss (silico-fluoride of calcium), found held in suspension in the waters of the mineral springs of Gastein. A trituration has also been made from the gneiss rock which is found in the Tauern mountains, and contains the ores of several metals; but that from the springs will probably be found the most reliable. Am.H.P.—Trituration, Class VII.

Lathyrus Sativus. N.O. Leguminosæ. Teoree, Kesaree. *Preparation.*—Trituration of the seeds.

LAUROCERASUS. (*Prunus Laurocerasus.*) N.O. Rosacæ. *Syn.* Padus laurocerasus, Cerasus folio laurino. Common Cherry Laurel of the B.P. Habitat, Persia and Asia Minor. Cultivated as an evergreen in all our gardens. *Preparation.*—Tincture of the mature fresh leaves, collected in August, corresponding in alcoholic strength with proof spirit, Process I. *Dispensing forms.*— ϕ and upwards, tincture, tincture-trituration, pilules, or globules. Average loss of moisture, 66 per cent. Am.H.P.—Tincture of the mature fresh leaves, Class II.

LEDUM. (*Ledum Palustre.*) N.O. Ericacæ. *Syn.* Roris-

marinum sylvestre, *Ledum Silesiacum*. Silesian Rosemary, Wild Rosemary, Marsh Ledum, Marsh Tea. Habitat, moist swampy ground in North of Europe, France, Asia and America. Flowering time, April to July. Parts employed, the small twigs and leaves. Time for collecting, soon after flowering begins. *Preparation*.—Tincture, using rectified spirit, Process I. *Dispensing forms*.— ϕ and upwards, tincture, tincture-trituration, pilules, or globules. Am.H.P.—Tincture of the fresh herb, Class III.

Lepidium Bonariense. (Ad.) N.O. Cruciferae. *Syn.* *Lepidium mastruco*. Buenos Ayres Pepperwort, Mastruco. Habitat, Rio. Am.H.P.—Tincture of the fresh leaves, Class III.

LEPTANDRA. (*Leptandra Virginica*.) N.O. Scrophulariaceae. *Syn.* *Veronica V.* Black Root, Culver's Physic, Tall Speedwell. Habitat, throughout the United States. Part employed, the root. *Preparations*.—Tincture of the fresh root, prepared in, and imported from, North America; trituration of the dry root. *Dispensing forms*.— ϕ and upwards, tincture, tincture-trituration, pilules, or globules, *Ad.*—Tincture of the imported dried root. Am.H.P.—Tincture of the fresh root of the second year, Class III.

Leptandrin. The resinoid of *Leptandra Virginica*. *Preparation*.—Trituration.

LILIUM TIGRINUM. N.O. Liliaceae. The Tiger Lily. Habitat, China and Japan; much cultivated as a garden plant. Flowering time, July and August. Parts employed, the stalks, leaves and flowers. Time for collecting, August, or when the plant is in full maturity. *Preparation*.—Tincture, corresponding in alcoholic strength with dilute alcohol, Process I. *Dispensing forms*.— ϕ and upwards, tincture, tincture-trituration, pilules, or globules. Average loss of moisture, 90 per cent. Am.H.P.—Tincture of the fresh plant, Class III.

Linimenta. These are sometimes medicated oils, using olive oil as the basis. More frequently the following tincture of soap is used:—Take of soft soap, 6 ounces; proof spirit, 24 fluid ounces. Dissolve by means of a gentle heat, and strain. Tinctures can be mixed with this in the proportion of 1 fluid drachm to 9 fluid drachms, and will

form convenient liniments or embrocations. N.B.—The liniments can be made much stronger if desired.

Linum Catharticum. N.O. Linaceæ. Purging Flax. Abundant in Britain. Parts employed, the entire fresh plant. *Preparation.*—Tincture, 20 o.p. spirit. Average loss of moisture, 25 per cent.

Lippspringe. This mineral spring of Westphalia has been proved.

LIQUOR ARSENICALIS. *Syn.* Liquor potassæ arsenitis. Fowler's Solution of Arsenic of the B.P., using rectified spirit instead of the tincture of lavender. Take of arsenious acid, in powder, 87 grains; carbonate of potassium, 87 grains; rectified spirit, 5 fluid drachms; distilled water, a sufficiency. Place the arsenious acid and the carbonate of potash in a flask with 10 ounces of the water, and apply heat until a clear solution is obtained. Allow this to cool, then add the rectified spirit, and as much distilled water as will make the bulk 1 pint. Characters and tests, *see* B.P., except that this preparation is colourless. *Preparation.*—This solution is our 2x; use proof spirit for the 3x attenuation, after which rectified spirit.

LIQUORES. *Solutions.*—"Watery solutions of inorganic substances, or of certain definite, active, organic principles." All watery solutions should be freshly prepared, except where the salt is sufficiently soluble to admit of the addition of a small quantity of spirit to preserve it. This must not be done, however, in cases where the drug would be decomposed on its addition. Where possible all solutions for homœopathic use are 10 per cent., which represents the first decimal, all definite crude chemical substances being called "mother." This is explained under ATTENUATIONS. As an example, suppose we wish to prepare the first decimal solution of Kali Carbonicum (Carbonate of Potassium), we dissolve 10 grains by weight in sufficient distilled water, so that the volume of the solution will measure 100 minims. Should the drug not be soluble to this extent, then the second decimal (1 in 100) must be prepared; in either case solution must be complete and without sediment.

Lithium Bromatum. (Ad.) (Bromide of Lithia.) *Syn.* Lithii bromidum. Can be obtained of the operative

chemist. Solubility, 1 in 1 of water, 1 in 5 of rectified spirit. *Preparation*.—Solution in distilled water 1 in 10, afterwards distilled water with 5 per cent. of spirit for 1 and 3x, then rectified spirit. Am.H.P.—Trituration.

LITHIUM CARBONICUM. (Lithic Carbonate, Li_2CO_3 .)

Syn. Lithii carbonas. Carbonate of Lithia. For characters and tests, see B.P. *Preparation*.—Trituration. *Dispensing forms*.—1x to 3, trituration only; 4 and upwards, tincture, tincture-trituration, pilules, or globules. Solubility, 1 in 100 of cold water. Insoluble in alcohol. B.P. dose, 3 to 6 grains. *Ad.*—Solution No. 1 to 2, afterwards spirit may be added. Am.H.P.—Trituration, Class VII.

Lobelia Cærulea. See LOBELIA SYPHILITICA.

Lobelia Cardinalis. N.O. Lobeliaceæ. Cardinal Flower. Habitat, United States. *Preparation*.—Tincture of the mature plant. Am.H.P.—Tincture of the fresh leaves, Class III.

LOBELIA INFLATA. N.O. Lobeliaceæ. Indian Tobacco. Habitat, fields and roadsides from Canada to Southern States. Flowering time, from midsummer to autumn. *Preparation*.—Tincture of the whole plant when in flower and seed, corresponding in alcoholic strength with proof spirit, Process I. *Ad.*—Tincture of the dried leaves, proof spirit. N.B.—It has been proposed to prepare this with ether, from the dried plant. *Dispensing forms*.— ϕ and upwards, tincture, tincture-trituration, pilules, or globules. Am.H.P.—Tincture of the fresh plant, Class III.

Lobelia Syphilitica. N.O. Lobeliaceæ. *Syn.* Lobelia cærulea, Rapuntium syphiliticum. Blue Lobelia, Great Lobelia. Indigenous to North America. *Preparation*.—Tincture of the fresh herb. Am.H.P.—Tincture of the fresh plant, Class III.

Lolium Temulentum. N.O. Graminaceæ. Bearded Darnel. *Preparation*.—Tincture of the ripe spikelets, proof spirit. Am.H.P.—Tincture of the ripe seeds, Class IV.

Lotiones. Lotions are prepared in the following ways :—
1. By simply diluting the medicine with distilled water in the proportion of 1 in 10, or 1 in 100; in the latter case, $1\frac{1}{2}$ fluid drachms to the pint is pretty nearly correct.

2. By diluting a glycerole of the medicine with four or nine times its measure of distilled water. 3. By mixing the medicine in the proportion of 1 in 100 with dilute alcohol to make an evaporating lotion.

Lupulus. (*Humulus Lupulus*, *Linn.*) N.O. Cannabinaceæ. The Hop. *Preparation.*—Tincture of the seeded spikes. Am.H.P.—Tincture of the fresh strobules, Class III.

LYCOPODIUM. (*Lycopodium Clavatum*.) N.O. Lycopodiaceæ. *Syn.* *Muscus terrestris repens*, *Pes ursinus*. Club Moss, Wolf's Claw. Habitat, hilly pastures and heaths in Central and Northern Europe, Russian Asia, and North America. Common in Great Britain, especially in the north. Fruiting time, summer and autumn. Parts employed, the spores, wrongly called pollen, or seeds. Time for collecting, summer and autumn. *Preparation.*—Trituration; tincture also is prepared, but it is doubtful whether it possesses all the virtues of the drug (B.H.P.). *Dispensing forms.*—1x to 3, trituration only; 4 and upwards, tincture, tincture-trituration, pilules, or globules. N.B.—In the tincture it is a question whether the spores are thoroughly broken up; ether will effect this; and a tincture might be made in the same way as suggested for lobelia; or 1 ounce of lycopodium may be digested a week with 4 ounces, or less, of pure ether in a wide-mouthed stoppered bottle, after which the stopper should be removed, and the ether allowed to evaporate, the lycopodium being digested with 10 ounces of rectified spirit. *Ad.*—φ and upwards, tincture, pilules, or globules. Am. H.P.—Tincture of the triturated drug, Class IV.; trituration, Class VII.

LYCOPUS. (*Lycopus Virginicus*.) N.O. Labiatae. Bugle Weed. Habitat, throughout the greater part of the United States, in shady and wet places. *Preparation.*—Tincture of the whole plant when in flower, corresponding in alcoholic strength with dilute alcohol. *Dispensing forms.*—φ and upwards, tincture, tincture-trituration, pilules, or globules. Am.H.P.—Tincture of the fresh plant, Class III.

MAGNESIA CARBONICA. (Magnesic Carbonate.) *Syn.*

Magnesii carbonas levis, Magnesiae carbonas levis. Light Carbonate of Magnesium of the B.P. (MgCO_3), $\text{Mg}(\text{HO})_2, 4\text{H}_2\text{O}$. For preparation, characters and tests, *see* B.P. *Preparation*.—Trituration. *Dispensing forms*.—1x to 3, trituration only; 4 and upwards, tincture, tincture-trituration, pilules, or globules. Solubility, 1 in 2,493 of cold water; 1 in 9,000 of hot water. B.P. dose, 10 to 60 grains. Am.H.P.—Trituration, Class VII.

MAGNESIA MURIATICA. (Magnesic Chloride, MgCl_2 .)

Syn. Magnesii chloridum. Chloride of Magnesium, Muriate of Magnesia. *Preparation*.—Solution in 20 o.p. spirit for 1x, using rectified spirit for all above. *Dispensing forms*.—1x and upwards, tincture, pilules, or globules. Am.H.P.—Trituration, Class VII.

Magnesia Phosphorica. (Hydric Magnesic Phosphate,

$\text{MgHPO}_4, 7\text{H}_2\text{O}$.) Phosphate of Magnesia. *Preparation*.—Trituration. Am.H.P.—Trituration, Class VII.

MAGNESIA SULPHURICA. (Magnesic Sulphate,

$\text{MgSO}_4, 7\text{H}_2\text{O}$.) *Syn.* Magnesii sulphas, Magnesiae sulphas. Sulphate of Magnesia, Epsom Salts. The commercial salt purified by re-crystallization. *Preparation*.—Solution in distilled water for 1x; using dilute alcohol for 1, and rectified spirit for all above; trituration. *Dispensing forms*.—1x and 1, solution; or 1x to 3, trituration; 3x and upwards, tincture, tincture-trituration, pilules, or globules. Solubility, 10 in 13 of cold water. B.P. dose, 60 grains to $\frac{1}{2}$ oz.

Magnesii Boras cum Ammonii Citrate. (Ad.) The

Citrated Borate of Magnesia, which consists of boracite, $3\text{MgO} \cdot 4\text{B}_2\text{O}_3$, and Citrate of Ammonia, has been recommended as a remedy for renal calculus. *Preparation*.—Trituration.

Magnesium Metallicum. (Ad.) (Magnesium Metal,

Mg.) A silver-white metal, of a strong metallic lustre. Am.H.P.—Trituration, Class VII.

Manganum Aceticum. (Manganous Acetate, $\text{Mn}(\text{C}_2$

$\text{H}_3\text{O}_2)_2, 4\text{H}_2\text{O}$.) Acetate of Manganese. Prepared by satu-

rating pure acetic acid with carbonate of manganese, and crystallizing. *Preparation*.—Solution in distilled water for 1*æ*, using dilute alcohol for 1, and rectified spirit for all above. *Dispensing forms*.—1*æ* and 1, solution only; 3*æ* and upwards, tincture, tincture-trituration, pilules, or globules. Am.H.P.—Trituration, Class VII.

Manganum Carbonicum. (Manganous Carbonate, $MnCO_3$.) Carbonate of Manganese. *Preparation*.—Trituration. *Dispensing forms*.—1*æ* to 3, trituration only; 4 and upwards, tincture, tincture-trituration, pilules, or globules. Am.H.P.—Trituration, Class VII.

Matico. See *PIPER ANGUSTIFOLIUM*.

Melilotus Officinalis. N.O. Leguminosæ. Common Melilot. *Preparation*.—Tincture of the flowers, proof spirit. Am.H.P.—Tincture of the fresh flowers, Class III.

Mentha Piperita. N.O. Labiatae. Peppermint. *Preparation*.—Tincture of the fresh flowering plant. Am.H.P.—Tincture of the fresh plant in flower, Class III.

Menyanthes. (Menyanthes Trifoliata.) N.O. Gentianaceæ. Buckbean, Marsh Trefoil. Habitat, marshy places and boggy ground in Europe, Russian Asia and North America; common in Great Britain. Flowers June to August. *Preparation*.—Tincture of the whole plant, at the commencement of flowering, corresponding in alcoholic strength with dilute alcohol, Process I. *Dispensing forms*.— ϕ and upwards, tincture, tincture-trituration, pilules, or globules. Am.H.P.—Tincture of the fresh plant, Class I.

Mephitis Putorius. The Skunk. Part employed, the secretion of the anal glands. It must be obtained in America direct from the animal. *Preparations*.—Trituration; tincture, using proof spirit. *Dispensing forms*.—1 to 3, trituration; or 1 and upwards, tincture, pilules, or globules. Am.H.P.—Tincture of the secretion, Class VI. *b*.

MERCURIALIS. (Mercurialis Perennis.) N.O. Euphorbiaceæ. Dog's Mercury. Habitat, woods and shady places throughout Europe and Russian Asia. Abundant in England and Scotland; very rare in Ireland. Flowers in early spring. *Preparation*.—Tincture of the entire fresh

plant when in flower and fruit, corresponding in alcoholic strength with dilute alcohol, Process I. *Dispensing forms.*— ϕ and upwards, tincture, tincture-trituration, pilules, or globules. Average loss of moisture, 84 per cent. Am.H.P. —Tincture of the fresh plant, Class II.

Mercurius Acetatus. (Mercurous Acetate, $\text{HgC}_2\text{H}_3\text{O}_2$.) Subacetate of Mercury. *Preparation.*—Trituration. *Dispensing forms.*—1 α to 3, trituration only; 4 and upwards, tincture, tincture-trituration, pilules, or globules. Am.H.P. —Trituration, Class VII.

Mercurius Bibromatus. (Mercuric Bromide, HgBr_2 .) *Syn.* Mercurii bibromidum. Prepared by agitating mercury with hot water, adding bromine as long as its colour is destroyed, then boiling, filtering, and crystallizing. It should be kept in an amber glass bottle. Recently recommended for the treatment of uterine diseases. *Preparation.*—Trituration.

MERCURIUS BINIODATUS. (Mercuric Iodide, HgI_2 .) *Syn.* Mercurii biniodidum, Mercurius iodatus ruber, Hydrargyri iodidum rubrum. Red Iodide of Mercury. For preparation, characters and tests, see B.P. *Preparation.*—Trituration. *Dispensing forms.*—1 α to 3, trituration only; 4 and upwards, tincture, tincture-trituration, pilules, or globules. Solubility: almost insoluble in water, 1 in 400, in alcohol, freely in the aqueous solution of iodide of potassium. B.P. dose, $\frac{1}{16}$ to $\frac{1}{8}$ grain. Am.H.P.—Trituration, Class VII.

Mercurius Bromatus. (Mercurous Bromide, HgBr .) *Syn.* Mercurii bromidum. Prepared by subliming an intimate mixture of atomic proportions of mercury and mercuric bromide. It should be kept in an amber glass bottle. *Preparation.*—Trituration.

MERCURIUS CORROSIVUS. (Mercuric Chloride, HgCl_2 .) *Syn.* Mercurius corrosivus sublimatus, Hydrargyri perchloridum. Corrosive Sublimate, Perchloride of Mercury. For preparation, characters and tests, see B.P. *Preparations.*—Trituration; solution in rectified spirit. *Dispensing forms.*—1 α to 3, trituration; or 1 α and upwards, tincture, tincture-trituration, pilules, or globules. Solubility, 1 in 19 of water, 1 in 5 of rectified spirit. B.P.

dose, $\frac{1}{10}$ to $\frac{1}{2}$ grain. Am.H.P.—Solution in alcohol, Class VI. *b*; trituration, Class VII.

Mercurius Cyanatus. (Mercuric Cyanide, $\text{Hg}(\text{CN})_2$.)
Syn. Mercurii cyanidum, M. cyanuretum, Hydrargyri cyanuretum, H. cyanidum. Bicyanide of Mercury. Can be obtained from the operative chemist. Like corrosive sublimate, this is a very powerful preparation of mercury
Preparations.—Solution in rectified spirit for 1 and upwards; trituration. Solubility, 1 in 15 of water, 1 in 20 of rectified spirit. Am.H.P.—Solution in distilled water, Class V. *b*; trituration, Class VII.

MERCURIUS DULCIS. (Mercurous Chloride, HgCl_2 .)
Syn. Hydrargyri subchloridum, Calomelas. Subchloride of Mercury, Calomel. For preparation, characters and tests, see B.P. *Preparation.*—Trituration. *Dispensing forms.*—1*x* to 3, trituration only; 4 and upwards, tincture, tincture-trituration, pilules, or globules. Insoluble in water, spirit, or ether. B.P. dose, $\frac{1}{2}$ to 5 grains. Am.H.P.—Trituration, Class VII.

MERCURIUS IODATUS. (Mercurous Iodide, HgI_2 .) *Syn.* Mercurii iodidum, Mercurius iodatus flavus, M. protoiodatus. Hydrargyri iodidum viride. Green Iodide of Mercury. Prepared as directed in the B.P. 1867, where also see characters and tests. Omitted in the B.P. 1885. Should be freshly made, as the biniodide forms after being kept some time. *Preparation.*—Trituration. *Dispensing forms.*—1*x* to 3, trituration only; 4 and upwards, tincture, tincture-trituration, pilules, or globules. Insoluble in water and alcohol. B.P. (1867) dose, 1 to 3 grains. Am.H.P.—Trituration, Class VII.

Mercurius Iodatus cum Kali Iodatum. (Ad.) (Double Iodide of Mercury and Potassium, K_2HgI_4 .) This is a canary-yellow salt, formed by the chemical union of one equivalent of red iodide of mercury and two equivalents of iodide of potassium. It is freely soluble in water.
Preparations.—Solution in distilled water; trituration.

Mercurius Præcipitatus Albus. (Mercurammonium Chloride, NH_4HgCl_2 .) *Syn.* Hydrargyrum ammoniatum, H. præcipitatum album. Ammoniated Mercury, White Precipitate. Prepared as directed in B.P. *Preparation.*

Trituration. Insoluble in water and alcohol. Am.H.P.—Trituration, Class VII.

Mercurius Præcipitatus Ruber. (Red Mercuric Oxide, HgO .) *Syn.* Hydrargyri oxidum rubrum, Hydrargyrum oxydatum rubrum. Red Precipitate, Red Oxide of Mercury. Prepared as directed in B.P. A powerful irritant. *Preparation.*—Trituration. Insoluble in water and alcohol. Am.H.P.—Trituration, Class VII.

MERCURIUS SOLUBILIS. (Dimercurosammonium Nitrate, $2(\text{NH}_4\text{Hg}_2\text{NO}_3\cdot\text{H}_2\text{O})$) *Syn.* Mercurius solubilis Hahnemanni. Hahnemann's Soluble Mercury. This preparation has an historical interest, as it was discovered by Hahnemann. His process for making it is needlessly complex, and it is difficult to insure any two consecutive preparations being alike. The process recommended by Hahnemann is as follows:—"Having purified the mercury, it is dissolved cold, in common nitric acid, which requires many days; the salt which results is dried on blotting-paper, and triturated in a glass mortar for half an hour, adding one-fourth of its weight of the best alcohol. The alcohol which has been converted into ether is thrown aside, and the trituration of the mercurial is continued with fresh alcohol, for half an hour each time, until this fluid no longer has the smell of ether. That being done, the alcohol is decanted, and the salt dried on blotting-paper, which is renewed from time to time. Afterwards it is triturated for a quarter of an hour, in a glass mortar, with twice its weight of distilled water; the clear fluid is decanted, the salt is again washed by a second trituration with a fresh quantity of water, the clear fluid is united to the preceding, and thus we have the aqueous solution of all that the saline mass consisting of mercurial nitrate really saturated. The residuum is composed of other mercurial salts, of chloride and sulphate. Finally, this aqueous solution precipitates, by caustic ammonia, the so-called black oxide of mercury (blackish-grey oxidule of mercury)." "In order to obtain uniformity in the preparation of this substance the following formula is suggested:—take of mercury, by weight, 3 ounces; nitric acid, 13 fluid drachms; strong solution of ammonia, $\frac{1}{2}$ a fluid ounce; distilled water

a sufficiency. Mix the nitric acid with 8 fluid ounces of the water in a flask, and digest the mercury in the mixture, applying a gradually increased heat until about $2\frac{1}{2}$ ounces of the metal have dissolved, and a small portion of the solution diluted with about 20 times its bulk of distilled water, yields a perfectly black precipitate with ammonia. Dilute the hot solution with 12 fluid ounces of the water, and, while warm, filter it into a vessel containing four times its bulk of cold distilled water. Having thoroughly mixed the filtrate with the water, add the solution of ammonia, previously diluted with 10 fluid ounces of distilled water, in a thin stream, stirring constantly meanwhile; as soon as the precipitate has subsided, decant the supernatant liquid, shake the precipitate with a fresh portion of distilled water, collect it on a filter, wash thoroughly, and dry it between folds of filtering paper without the aid of heat. *Characters and Tests.*—A heavy, greyish-black powder possessing a slight, somewhat acrid, metallic taste; insoluble in water, alcohol or ether. Heated gently in a test tube it becomes yellow, and gives off moisture. It is entirely volatilized by a heat under redness, and at the same time decomposes, evolving nitrous fumes. Ten grains boiled gently with caustic potash give off sufficient ammonia to restore the blue colour to moistened red litmus paper placed over the mouth of a tube, the inside of which has been previously wiped dry and carefully closed with a piece of filtering paper. It contains no metallic globules" (B.H.P.). *Preparation.*—Trituration. *Dispensing forms.*—1x to 3, trituration only; 4 and upwards, tincture, tincture-trituration, pilules, or globules. Am.H.P. —Trituration, Class VII.

Mercurius Sulphuratus Ruber. (Mercuric Sulphide, HgS.) *Syn.* Cinnabaris. Vermilion, Cinnabar. Prepared by sublimation of a mixture of 6 parts of metallic mercury and 1 part of the flowers of sulphur. *Preparation.*—Trituration. *Dispensing forms.*—1x to 3, trituration only; 4 and upwards, tincture, tincture-trituration, pilules, or globules.

MERCURIUS VIVUS. (Metallic Mercury, Quicksilver, Hg.) *Syn.* Hydrargyrum. *Preparation.*—Trituration. *Dispensing forms.*—1x to 3, trituration only; 4 and up-

wards, tincture, tincture-trituration, pilules, or globules. N.B.—Some difficulty is experienced in making the first decimal trituration, the globules of mercury remaining a long time visible; the process is greatly facilitated by the addition of a few drops of water, so as to damp the sugar of milk. Am.H.P.—Trituration, Class VII.

MEZEREUM. (*Daphne Mezereum.*) N.O. Thymelacæ. *Syn.* *Chamælia Germanica*, *Daphnoides*, *Thymelæa*. Common Mezereon, Spurge Olive. Habitat, in hilly woods over nearly the whole of Europe and Russian Asia. The bark is the part used, and should be collected before the plant flowers, which takes place in February and March. *Preparation.*—Tincture corresponding in alcoholic strength with 20 O.P. spirit, Process I. *Dispensing forms.*— ϕ and upwards, tincture, tincture-trituration, pilules, or globules. Average loss of moisture, 66 per cent. Am.H.P.—Tincture of the fresh bark, Class II.

MILLEFOLIUM. (*Achillea Millefolium.*) N.O. Compositæ. Milfoil, Yarrow. Habitat, in pastures, meadows, and waste places all over Europe and Russian Asia, and a great part of North America. Extremely common in England. It flowers the whole summer. We use the entire plant, collected in June and July. *Preparation.*—Tincture corresponding in alcoholic strength with proof spirit, Process I. *Dispensing forms.*— ϕ and upwards, tincture, tincture-trituration, pilules, or globules. Average loss of moisture, 67 per cent. Am.H.P.—Tincture of the fresh plant, Class I.

Mitchella Repens. N.O. Rubiacæ. Partridge Berry, Checker Berry, Winter Clover. This must not be confounded, on account of its common name, with the *Gaultheria procumbens*. It is indigenous to the United States. *Preparation.*—Tincture of the whole plant. Am.H.P.—Tincture of the fresh plant, Class III.

Morphinum. (Morphine, or Morphia, $C_{17}H_{19}NO_3 \cdot H_2O$.) Morphia. The chief alkaloid obtained from opium. *Preparations.*—Trituration; solution in rectified spirit for 1 and upwards. Solubility, sparingly in water, 1 in 100 in rectified spirit. Am.H.P.—Trituration, Class VII.

MORPHINUM ACETICUM. (Morphine, or Morphia

Acetate, $C_{17}H_{19}NO_3.HC_2H_3O_2.3H_2O$.) *Syn.* Morphine acetate, Morphine acetate. For characters and tests, see B.P. *Preparations.*—Trituration; solution in a mixture of 3 measures of distilled water with 1 of rectified spirit for 1, using dilute alcohol for 3x, and rectified spirit for all above. Solubility, 1 in 5 of water, 1 in 100 of rectified spirit. B.P. dose, $\frac{1}{4}$ to $\frac{1}{2}$ grain. Am.H.P.—Trituration, Class VII.

MORPHINUM MURIATICUM. (Morphine, or Morphia Hydrochloride, $C_{17}H_{19}NO_3.HCl.3H_2O$.) *Syn.* Morphia hydrochlorate, Morphine hydrochlorate. For characters and tests see B.P. *Preparations.*—Trituration; solution in a mixture of 3 measures of distilled water with 1 of rectified spirit for 1, using dilute alcohol for 3x, and rectified spirit for all above. Solubility, 1 in 20 of water, 1 in 90 of rectified spirit. B.P. dose, $\frac{1}{4}$ to $\frac{1}{2}$ grain. Am.H.P.—Trituration, Class VII.

Morphinum Sulphuricum. (Morphine, or Morphia Sulphate ($C_{17}H_{19}NO_3$), $H_2SO_4.5H_2O$.) *Syn.* Morphia sulphate, Morphine sulphate. *Preparations.*—Trituration; solution in distilled water for 1x, using distilled water to which 5 per cent. of rectified spirit has been added for 1, dilute alcohol for 3x, and rectified spirit for all above. Solubility, 1 in 24 of water, sparingly in rectified spirit. Am.H.P.—Trituration, Class VII.

MOSCHUS. (*Moschus Moschiferus*.) The Musk Deer. Musk. Habitat, Central Asia. Part employed, the dried secretion of the preputial follicles. N.B.—Great care is necessary in ascertaining that the sample is genuine, as imitation sacs are sometimes made out of the skin of the animal, and the musk itself is adulterated with such things as dried blood, the dung of birds, wax, &c. If the sacs are obtained, they should present no evidence of having been opened. *Preparations.*—Trituration; tincture, 1 in 20, using rectified spirit, Process I. *Dispensing forms.*—1x to 3, trituration; or ϕ and upwards, tincture, tincture-trituration, pilules, or globules. Am.H.P.—Tincture, 1 in 20, using dilute spirit; dilutions as Class IV., except that dilute alcohol is used for the 1 and 2x dilutions; trituration, Class VII.

Murex Purpurea. Purple Fish. Habitat, Mediterranean,

Adriatic, and other seas. Part employed, the desiccated juice. *Preparation*.—Trituration. Am.H.P.—Trituration of the fresh juice, Class VIII.

Muscarinum. (Muscarine, or Muscaria, $C_8H_{13}NO_2 \cdot H_2O$.) An alkaloid first obtained from *Agaricus muscarius*, but now prepared artificially by the action of nitric acid upon choline, prepared from hen's eggs. Both the natural and the artificial alkaloids have been used in the provings. *Preparation*.—Solution in distilled water for 1x, using dilute alcohol for 1, and rectified spirit for all above.

Mygale Avicularia. The Bird Spider of Texas. Parts employed, the entire animal. *Preparation*.—Tincture, using proof spirit. Am.H.P.—Tincture of the live insect, Class IV.

Mygale Lasiodora. (Ad.) *Syn.* *Mygale lasiodora* Cubana. A large, black, Cuban spider. Am.H.P.—Tincture of the live insect, Class IV.

Myrica Cerifera. N.O. Myricaceæ. Bayberry, Wax-Myrtle, Candleberry. Habitat, United States, New England to Louisiana. *Preparation*.—Tincture of the bark of the root. Recommended in diarrhoea and dysentery. Am. H.P.—Tincture of the fresh bark of the root, Class III.

Myrtus Communis. N.O. Myrtaceæ. Common Myrtle. Habitat, South of Europe. *Preparation*.—Tincture of the fresh shoots and leaves. Am.H.P.—Tincture of the fresh flowering shoots and leaves, Class III.

Nabalus Serpentarius. N.O. Compositæ. *Syn.* *Prenanthes serpentaria*. Lion's Foot, White Lettuce, Rattlesnake root. Common in mountainous districts of Virginia, North Carolina, and other parts of the United States. Supposed by some to be a variety of the *Nabalus alba*. *Preparation*.—Tincture of the entire fresh plant. Am.H.P.—Tincture of the fresh plant, Class III.

NAJA TRIPUDIANS. Cobra de Capello, Hooded Snake. Habitat, commonly found in Hindostan. Part employed, the venom. Active principle, cobric acid. *Collection*.—The venom must be collected as explained under the head of *CROTALUS*. *Preparation*.—Solution in glycerine, and

subsequent attenuation in the same manner as *Crotalus*.
Dispensing forms.—Below 6, solution only; 6 and upwards, tincture, pilules, or globules. Am.H.P.—Trituration, Class VIII.

Narcissus Poeticus. N.O. Amaryllidaceæ. Poet's *Narcissus*. *Preparation*.—Tincture of the bulb.

Narcotinum. (Narcotine, or *Narcotia*, $C_{22}H_{23}NO_7$.) An alkaloid obtained from opium. *Preparations*.—Trituration; solution in rectified spirit. Insoluble in water. Am.H.P.—Trituration, Class VII.

Narcotinum Aceticum. (Narcotine Acetate, $C_{22}H_{23}NO_7 \cdot C_2H_4O_2$.) *Syn.* *Narcotiæ acetat*. Acetate of Narcotine. *Preparation*.—Same as corresponding salt of morphia.

Narcotinum Muriaticum. (Narcotine Hydrochloride, $C_{22}H_{23}NO_7 \cdot HCl \cdot 3H_2O$.) *Syn.* *Narcotiæ hydrochloras*. *Preparation*.—Same as corresponding salt of morphia.

Natri Iodidum. (Ad.) (Sodic Iodide, NaI .) Iodide of Sodium of the B.P. Obtained from the operative chemist. This has been stated to have an elective affinity for the periosteum of the jaws. Also much used in constitutional syphilis. B.P. dose, 3 to 10 grains. *Preparations*.—Solution in dilute alcohol; trituration. Solubility, 2 in 1 of water, 1 in 3 of spirit.

Natrium Arsenicum. (Hydric Disodic Arsenate, $Na_2HAsO_4 \cdot 12H_2O$.) *Syn.* *Natri arsenias*, *Sodæ arsenias*, *Sodii arsenias*. Arseniate of Sodium. Prepared as directed in the B.P., where *see* characters and tests. *Homæopathic preparation*.—Solution in water for 1*x*, using distilled water to which 5 per cent. of rectified spirit has been added for 1, dilute alcohol for 3*x* and 2, and afterwards rectified spirit. Solubility, 1 in 2 of water. B.P. dose, $\frac{1}{16}$ to $\frac{1}{2}$ grain. Am.H.P.—Trituration, Class VII.

NATRUM CARBONICUM. (Sodic Carbonate, $Na_2CO_3 \cdot 10H_2O$.) *Syn.* *Sodæ carbonas*, *Sodii carbonas*. Carbonate of Sodium. The common soda of the shops, purified by solution in distilled water and recrystallization. For characters and tests *see* B.P. *Preparations*.—Trituration; solution in distilled water for 1*x*, dilute alcohol for 1, 20 o.p. spirit for 3*x*, and rectified spirit for all above. *Dispensing forms*.—1*x* to 3, trituration; or 1*x* and 1, solution;

3*x* and upwards, tincture, tincture-trituration, pilules, or globules. Solubility, 1 in 2 of water; insoluble in rectified spirit. B.P. dose, 5 to 30 grains. Am.H.P.—Trituration, Class VII.

Natrum Causticum. (Sodium Hydroxide, or Hydrate, NaHO.) *Syn.* Liquor sodæ of the B.P. A solution of caustic soda in distilled water containing 18·8 grains in each fluid ounce, and answering to the tests of the B.P. *Homœopathic preparation.*—1 fluid drachm mixed with 3 fluid drachms of distilled water will form the 1 attenuation, from which 3*x* and 2 can be prepared with dilute alcohol, and all above with rectified spirit.

Natrum Chloratum. *Syn.* N. hypochlorosum, Liquor sodæ chlorinatæ of the B.P. Chlorinated Soda, Labarraque's Solution. For characters and tests *see* B.P. *Homœopathic preparation.*—Solution in distilled water. B.P. dose, 10 to 20 minims.

Natrum Hypophosphorosum. (Ap.) (Sodic hypophosphite, NaPH₂O₂.) *Syn.* Natri hypophosphis, Sodæ hypophosphis, Sodii hypophosphis. Hypophosphite of Sodium of the B.P. *Homœopathic preparation.*—Solution in syrup up to 1, using equal parts of syrup and distilled water to which 5 per cent. of rectified spirit has been added for 3*x*, dilute alcohol for 2, and rectified spirit for all above. Solubility, 1 in 1 of water, 1 in 2 of glycerine, 1 in 25 of spirit. B.P. dose, 5 to 10 grains. Would not glycerine be a better vehicle than the syrup for 1*x*? Am.H.P.—Trituration, Class VII.

NATRUM MURIATICUM. (Sodic Chloride, NaCl.) *Syn.* Sodii chloridum. Chloride of Sodium. Common salt purified by solution in distilled water and re-crystallization. For characters and tests *see* B.P. *Preparations.*—Trituration; solution in distilled water for 1*x*, 20 O.P. spirit for 1, and rectified spirit for all above. *Dispensing forms.*—1*x* to 3, trituration; or 1*x*, solution; 1 and upwards, tincture, tincture-trituration, pilules, or globules. Solubility, about 1 in 3 of water, 1 in 200 of rectified spirit. Am.H.P.—Solution in distilled water, Class V. *a*; trituration, Class VII.

NATRUM NITRICUM. (Sodic Nitrate, NaNO₃.) *Syn.*

Sodæ nitras, Sodii nitras. Nitrate of Sodium, Cubic Nitre. Prepared from the native salt by solution in distilled water and re-crystallization. For characters and tests *see* B.P. *Preparations.*—Trituration; solution in distilled water for 1*x*, rectified spirit may be used for all above. Soluble in about 2 parts of water. *Dispensing forms.*—1*x* to 3, trituration, or 1*x*, solution; 1 and upwards, tincture, tincture-trituration, pilules, or globules. Am.H.P.—Trituration, Class VII.

Natrum Phosphoricum. (Hydric Disodic Phosphate, $\text{Na}_2\text{HPO}_4, 12\text{H}_2\text{O}$.) *Syn.* Natri phosphas, Sodæ phosphas, Sodii phosphas. Rhombic Phosphate of Soda. Common phosphate of soda purified by re-crystallization. For characters and tests *see* B.P. *Homœopathic preparations.*—Trituration; solution in distilled water for 1*x*, using distilled water to which 5 per cent. of rectified spirit has been added for 1, dilute alcohol for 3*x* and 2, and rectified spirit for all above. Solubility, 1 in 5 of water, insoluble in rectified spirit. B.P. dose, $\frac{1}{4}$ to 1 ounce. Am.H.P.—Trituration, Class VII.

Natrum Salicylicum. *See* SODÆ SALICYLATUM.

Natrum Sulphocarbolicum. *See* SODII SULPHOCARBOLAS.

NATRUM SULPHURICUM. (Sodic Sulphate, $\text{Na}_2\text{SO}_4, 10\text{H}_2\text{O}$.) *Syn.* Sodæ sulphas, Sodii sulphas. Glauber's Salt, Sulphate of Sodium. The commercial salt purified by solution in distilled water and re-crystallization. For characters and tests *see* B.P. *Homœopathic preparations.*—Trituration; solution in distilled water for 1*x*, dilute alcohol for 1, 20 O.P. spirit for 3*x*, and rectified spirit for all above. *Dispensing forms.*—1*x* to 3, trituration, or 1*x* and 1, solution; 3*x* and upwards, tincture, tincture-trituration, pilules, or globules. B.P. dose, $\frac{1}{4}$ to 1 ounce. Solubility, 1 in 3 of water, insoluble in rectified spirit. Am. H.P.—Trituration, Class VII.

Natrum Sulphurosum. (Sodic Sulphite, $\text{Na}_2\text{SO}_3, 7\text{H}_2\text{O}$.) *Syn.* Natri sulphis, Sodæ sulphis, Sodii sulphis. Sulphite of Sodium. Obtained by the action of sulphurous acid on carbonate of sodium or on caustic soda. For characters and tests *see* B.P. *Homœopathic preparations.*—Tritura-

tion; solution in distilled water for 1*x*, using distilled water to which 5 per cent. of rectified spirit has been added for 1, dilute alcohol for 3*x* and 2, and rectified spirit for all above. B.P. dose, 5 to 20 grains.

Niccolum. (Ad.) (Metallic Nickel, Ni.) *Syn.* Niccolum metallicum. Am.H.P.—Trituration, Class VII.

Niccolum Bromidum. (Ad.) (Bromide of Nickel.)

Preparations.—Trituration; solution in distilled water. Suggested for headaches.

Niccolum Carbonicum. (Nickel Carbonate, NiCO_3 .) Carbonate of Nickel. Precipitated as a crystalline powder by pouring a dilute solution of chemically pure nitrate of nickel into a large excess of a solution of bicarbonate of soda, collecting the precipitate, washing and drying. *Preparation.*—Trituration. *Dispensing forms.*—1*x* to 3, trituration only; 4 and upwards, tincture, tincture-trituration, pilules, or globules. Am.H.P.—Trituration, Class VII.

Niccolum Sulphuricum. (Nickel Sulphate, $\text{NiSO}_4 \cdot 7\text{H}_2\text{O}$.) *Syn.* Niccoli sulphas. Sulphate of Nickel. Prepared by dissolving carbonate of nickel in dilute sulphuric acid, and crystallizing the salt. *Homœopathic preparations.*—Trituration; solution in distilled water for 1*x*, using distilled water to which 5 per cent. of rectified spirit has been added for 1, dilute alcohol for 3*x* and 2, and rectified spirit for all above. Am.H.P.—Trituration, Class VII.

Nicotinum. (Nicotine, $\text{C}_{10}\text{H}_{14}\text{N}_2$.) A volatile liquid alkaloid obtained from tobacco. A strong poison. *Homœopathic Preparation.*—Solution in absolute alcohol for 1. Am.H.P.—Solution in alcohol, Class VI. *b*.

Nitrobenzinum. (Nitro-benzene, $\text{C}_6\text{H}_5(\text{NO}_2)$.) *Syn.* Benzinum nitricum. Artificial Oil of Bitter Almonds. Essence of Mirbane. Prepared by the gradual addition of pure benzene to strong nitric acid in a cooled vessel, washing the product first with water, and then with a dilute solution of carbonate of soda. *Homœopathic preparation.*—Solution in rectified spirit for 1*x* and upwards.

Nuphar Lutea. N.O. Nymphæacæ. *Syn.* N. minima, Nymphæa lutea. Small Yellow Pond Lily. *Preparation.*—Tincture of the fresh root with dilute alcohol. Average

loss of moisture, 90 per cent. Am.H.P.—Tincture of the fresh root, Class III.

NUX JUGLANS. (*Juglans Regia.*) N.O. Juglandaceæ. Walnut. Habitat, Persia and North America; abundantly grown in Europe. Flowers in spring. The parts employed are the fresh leaves, or the green, unripe fruit, collected, the leaves while the fruit is very young, the fruit in July. *Preparations.*—1. Tincture of the green fruit. 2. Tincture of the leaves; corresponding in alcoholic strength with dilute alcohol in each case. Process I. *Dispensing forms.*— ϕ and upwards, tincture, tincture-trituration, pilules, or globules. Average loss of moisture from fruit, 86 per cent.

NUX MOSCHATA. (*Myristica officinalis.*) N.O. Myristicaceæ. *Syn.* Nux Myristica, Myristica fragrans. Nutmeg of the B.P. Habitat, Molucca Islands, cultivated in the Banda Islands of the Malayan Archipelago. Part employed, the kernel, or common nutmeg. *Preparation.*—Tincture, using rectified spirit. Process I. *Dispensing forms.*— ϕ and upwards, tincture, tincture-trituration, pilules, or globules. *Ad.*—Trituration of the powdered nut. Am.H.P.—Tincture of the dried nut, Class IV.

NUX VOMICA. (*Strychnos Nux Vomica.*) N.O. Loganiaceæ. *Syn.* Nux vomica officinarum. Poison-Nut. Parts employed, the seeds as imported. For characters of seeds see B.P. *Preparations.*—Tincture, using 20 O.P. spirit, Process I.; trituration. N.B.—As the hard, horny nature of the seed renders it extremely difficult to pulverize in a mortar, it should be first coarsely ground in a suitable mill. *Dispensing forms.*—1 α to 3, trituration; or ϕ and upwards, tincture, tincture-trituration, pilules, or globules. Am.H.P.—Tincture of the seed, Class IV.; trituration, Class VII.

Nymphæa Odorata. N.O. Nymphæaceæ. American White Water-lily. *Preparation.*—Tincture of the fresh root. Am. H.P.—Tincture of the fresh root, Class III.

Ocimum Canum. N.O. Labiatæ, Brazilian Alfavaca.

Hoary Basil. *Preparation.*—Tincture of the leaves. Am. H.P.—Tincture of the fresh leaves, Class III.

Ceanothe Crocata. N.O. Umbelliferae. Hemlock, Water Dropwort, Dead Tongue. *Preparation.*—Tincture of the root, proof spirit. Average loss of moisture, 86 per cent. Am.H.P.—Tincture of the fresh root, Class III.

Ceanothera Biennis. (Ad.) N.O. Onagraceae. Evening Primrose, Tree Primrose. Habitat, North America. Am. H.P.—Tincture of the fresh plant, Class III.

OLEANDER. (Nerium Oleander.) N.O. Apocynaceae. Common Rosebay. Native of Southern Europe and East Indies. Parts employed, the fresh or dry leaves of the wild plant are the official parts employed, and should be collected at the commencement of flowering. *Characters.*—"Leaves on short stalks, linear-lanceolate, acute, entire, smooth, coriaceous, evergreen, marked with numerous transverse ribs or veins beneath" (B.H.P.). *Homœopathic preparation.*—Tincture corresponding in alcoholic strength with proof spirit, Process I. *Dispensing forms.*— ϕ and upwards, tincture, tincture-trituration, pilules, or globules. Am.H.P.—Tincture of the fresh leaves, Class II.

Oleum Amygdalæ. (Almond Oil of the B.P.)

Oleum Animale. *Syn.* Oleum animale æthereum, O. A. Dippelii. Dippel's Animal Oil. "An empyreumatic oil, the chemical constitution of which is most complex. It is obtained during the destructive distillation of bone, ivory, hair, wool, &c., and then separating the fetid oil from the other products, and purifying it by re-distillation from a mixture of the oil and four times its bulk of distilled water, repeating this latter process until a perfectly colourless liquid is produced. It should be kept in a well-stoppered amber glass bottle" (B.H.P.). *Preparation.*—Solution in rectified spirit, which forms the 1 α attenuation. *Dispensing forms.*—1 α and upwards, tincture, pilules, or globules. Am.H.P.—Trituration, Class VIII.; or, solution in alcohol, Class VI. a.

Ol. Jecoris Aselli. (Ad.) Cod-liver Oil. The oil extracted from the fresh liver of *Gadus morrhua* by a steam heat. *Preparations.*—Pure oil; trituration; tincture. Am.H.P.—Trituration as Class VIII.

Oleum Olivæ. (Olive Oil of the B.P.)

Ol. Ricini. (Ad.) N.O. Euphorbiacæ. Extracted from the seeds of *Ricinus communis*. *Preparation.*—Trituration (1 dr. ol. ricini to 9 drachms sacch. lactis); solution in absolute alcohol for 1x (Hale). Am.H.P.—Solution in alcohol, Class VI. b.

Ol. Santalum. (Ad.) N.O. Santalacæ. Extracted from the wood of the *Santalum album*, growing in the Indies, China and Ceylon. Useful in all affections of mucous surfaces of the respiratory and urinary organs. *Preparations.*—Trituration; solution in rectified spirit.

Olibanum. (Ad.) N.O. Burseracæ. Gum Olibanum, Frankincense. Habitat, India, Southern Arabia, and Eastern Africa. Am.H.P.—Trituration, Class VII.

Oniscus Asellus. (Ad.) Common Wood Louse, Sow Bug. Am.H.P.—Tincture of the live animals, Class IV.

Ononis Spinosa. (Ad.) N.O. Leguminosæ. Common Rest Harrow. Habitat, Europe. Am.H.P.—Tincture of the fresh plant, Class III.

OPIUM. (*Papaver Somniferum*.) N.O. Papaveracæ. *Syn.* *P. sylvestre*, *P. sativum*. White Poppy. Habitat, Asia Minor, Southern Europe and the Levant. Part employed, the inspissated juice, constituting the opium of commerce. For characters and tests *see* B.P. One grain of opium should yield about $\frac{1}{10}$ grain of morphine. *Preparations.*—Trituration; tincture, 1 in 20, using proof spirit, Process I., rubbing down the opium with three or four times its bulk of coarsely powdered glass, before packing. *Dispensing forms.*—1x to 3, trituration; or, ϕ and upwards, tincture, tincture-trituration, pilules, or globules. N.B.—The tincture as ordered above varies from that ordered in the first edition of the B.H.P., as it has been found that 10 parts of liquid are insufficient to exhaust the magma; it therefore differs in strength from the 1x trituration. B.P. dose, $\frac{1}{2}$ grain to 3 grains. Am.H.P.—Tincture, Class IV.; trituration, Class VII.

OPODELDOCS. Opodeldocs are semi-solid liniments, and are prepared as follows:—Take of white curd soap, 4½ ounces; rectified spirit, 15 fluid ounces; distilled water, 9 fluid ounces. Dissolve the soap in the water by a gentle

heat, then add very gradually the rectified spirit and the medicine (in the proportion of 1 fluid drachm of ϕ tincture to 9 fluid drachms of the opodeldoc); stir well, and while still fluid strain and pour into bottles. Arnica and rhus are the two chief remedies used in this form; others also are in frequent use, as the following:—Bryonia, arnica and rhus mixed as recommended by Dr. Hering, rhododendron, aconite, belladonna, &c.

Opuntia Vulgaris. (Ad.) N.O. Cactaceæ. Prickly Pear. A species of cactus found all over the United States, in sandy fields, and under rocks. It affects the intestinal mucous membrane. Flowers in June. *Preparations.*—Tincture of the whole plant; tincture of the fresh petals. Am.H.P.—Tincture of the fresh twigs and flowers, Class III.

Origanum Vulgare. N.O. Labiatae. Wild marjoram. *Preparation.*—Tincture of the fresh plant, proof spirit. Average loss of moisture, 72 per cent. Am.H.P.—Tincture of the fresh herb in flower, Class III.

Osmium. (Os.) A rare metal found associated with Platinum. *Preparation.*—Trituration. Am.H.P.—Trituration, Class VII.

PÆONIA OFFICINALIS. N.O. Ranunculaceæ. *Syn.* Rosa benedicta. Peony. Habitat, Europe and Central Asia; much cultivated in gardens, and naturalized in Steep Holme Island, in the Severn. The root should be collected in April before flowering time. *Preparation.*—Tincture of the fresh root corresponding in alcoholic strength with proof spirit, Process I. *Dispensing forms.*— ϕ and upwards, tincture, tincture-trituration, pilules, or globules. Average loss of moisture, 50 per cent. Am.H.P.—Tincture of the fresh root, Class I.

Palladium. (Pd.) A rare metal found associated with platinum. *Preparation.*—Trituration. Am.H.P.—Trituration, Class VII.

Panax Quinquifolium. See GINSENG.

Papaya. (Carica Papaya.) N.O. Papayaceæ. The Papaw Tree. Habitat, West Indies and Central America. *Preparation.*—Tincture of the unripe fruit.

PARIS QUADRIFOLIA. N.O. Trilliaceæ. *Syn.* Herba

Paris, *Solanum quadrifolium*, *Aconitum pardaliancha*. Herb Paris, True Love, One Berry. Habitat, woods and shady places in Europe and Russian Asia ; several parts of Britain, but very local. Flowers spring and early summer. Parts employed, the entire plant, collected at the commencement of flowering. *Preparation.*—Tincture corresponding in alcoholic strength with proof spirit, Process I. *Dispensing forms.*— ϕ and upwards, tincture, tincture-trituration, pilules, or globules. Am.H.P.—Tincture of the entire fresh plant, Class I.

Passiflora Incarnata. (Ad.) N.O. Passifloraceæ. White

Passion Flower. Habitat, dry soil, Virginia, Kentucky and southward. Flowering time, May to July. Used in syphilis and tetanus. Parts employed, fresh or dried leaves. *Preparation.*—Tincture, dilute alcohol. Am.H.P.—Tincture of the fresh leaves, Class III.

Penthorum Sedoides. (Ad.) N.O. Crassulaceæ. Vir-

ginia Stone Crop. Found growing in wet grounds throughout the United States and Canada. Flowering time, July and October. Used in cases of catarrh and diarrhoea. *Preparation.*—Tincture. Am.H.P.—Tincture of the fresh plant, Class III.

Pepo. (*Cucurbita Pepo.*) (Ad.) N.O. Cucurbitaceæ. The

Common Pumpkin. Cultivated in Great Britain. Part employed, the seeds. *Preparations.*—Emulsion of pulp, with milk or cream, as a remedy for tapeworm. See Dr. Hale's "New Remedies." Am.H.P.—Tincture of the fresh stems, Class III.

Pepsin. (Ad.) Triturations are made of the powdered

pepsin in the usual way, but are not generally used. We have introduced a preparation which we term "Soluble Pepsin." This is a solution of the gastric juice preserved in its freshest state, and having the following great advantage:—*it is not injured by the process of drying.* When prescribed it should be designated as Soluble Pepsin (Keene & Ashwell). Am.H.P.—Trituration.

PETROLEUM. *Syn.* *Oleum petreæ album.* Rectified Oil of

Petroleum. The substance which Hahnemann employed in his proving is made by agitating the liquid portion of

commercial petroleum with sulphuric acid, and then rectifying the portion which this acid does not act upon. "To secure its freedom from other volatile oils, agitate with an equal bulk of rectified spirit, and separate it from the spirits by means of a burette. It must be preserved in well-stoppered bottles." *Characters and tests.*—"A light, oily fluid, colourless, or of a pale straw colour, and strong characteristic naphthalic smell. When agitated with a mixture of equal volumes of sulphuric acid and water, no change takes place beyond its imparting to the acid any yellow tint it may possess, and itself becoming colourless. Dropped on white paper, it evaporates completely, leaving no greasy stain" (B.H.P.). *Preparation.*—Solution in rectified spirit, 1 in 10, forming the 1x attenuation. *Dispensing forms.*—1x and upwards, tincture, pilules, or globules. Am.H.P.—Solution in alcohol, Class VI. b.

PETROSELINUM. (*Petroselinum Sativum.*) N.O. Umbelliferae. *Syn.* *Apium petroselinum.* Common Parsley. Habitat, Eastern Mediterranean; much cultivated, and in this manner naturalized in most places. Parts employed, the entire fresh plant as flowering commences. *Preparation.*—Tincture corresponding in alcoholic strength with dilute alcohol, Process I. *Dispensing forms.*— ϕ and upwards, tincture, tincture-trituration, pilules, or globules. Average loss of moisture, 82 per cent. Am.H.P.—Tincture of the fresh plant, Class I.

PELLANDRIUM. (*Enanthe Phellandrium.*) N.O. Umbelliferae. *Syn.* *Phellandrium aquaticum.* Fine-leaved Water Dropwort. Habitat, temperate Europe and Russian Asia. Not uncommon in England and Ireland. Flowers in summer. Part employed, the ripe fruit in September. *Preparation.*—Tincture, using rectified spirit, Process I. *Dispensing forms.*— ϕ and upwards, tincture, tincture-trituration, pilules, or globules. Am.H.P.—Tincture of the fruit, Class IV.

Phoradendron. (Ad.) (*Phoradendron Flavescens.*) N.O. Loranthaceae. *Syn.* *Viscum flavescens.* American, or False Mistletoe; grows on the elm. *Symptoms of poisoning.*—Vomiting, great thirst, followed by frequent discharge of

bloody mucus from the bowels, with tenesmus. Parts employed, the ripe berries. *Preparation*.—Tincture.

PHOSPHORUS. (Common Transparent Phosphorus, P.)

A non-metallic element obtained from bones, and may be procured chemically pure. The following are the preparations of the B.H.P.:—1. Saturated solution in ether, which will contain 1 grain of phosphorus in about 200 minims. 2. Saturated solution in absolute alcohol, which will contain 1 grain of phosphorus in about 550 minims. When making the alcoholic solution the bottle, with the stopper loose, should be placed in hot water, till the phosphorus melts, when the stopper should be made firm, and the melted phosphorus vigorously shaken with the liquid, until the excess of the drug has solidified in minute granules. It is well to keep a stick of phosphorus in each solution, renewing it whenever it becomes coated with the amorphous variety of the drug, so that the solution may always retain its full strength. Both solutions should be made frequently, and preserved in amber glass-stoppered bottles, at the temperature of 60° F., as a considerable decrease of strength occurs when the temperature falls much below that point. The 3*x* attenuation of either solution is prepared by adding absolute alcohol until the proportion of 1,000 minims to each grain is reached; those above 3*x* are made with rectified spirit. *Dispensing forms*.—Below 3*x*, solution only; 3*x* and upwards, tincture, pilules, or globules. Soluble in cod-liver oil, with which it is often given in cases of consumption. Am.H.P.—Solution in strong alcohol.

PHYSOSTIGMA. (Physostigma Venenosum.) N.O. Leguminosæ. *Syn.* Physostigmatis faba. Calabar Bean. Imported from Western Africa. *Preparations*.—Tincture of the seeds or bean, using rectified spirit, Process I.; trituration. *Dispensing forms*.—1*x* to 3, trituration; or, ϕ and upwards, tincture, tincture-trituration, pilules, or globules. Am.H.P.—Tincture of the bean, Class IV.

PHYTOLACCA. (Phytolacca Decandra.) N.O. Phytolaccaceæ. *Syn.* Phytolacca vulgaris, P. Americana, Solanum racemosum Americanum, Solanum magnum Virginianum, Blitum Americanum. Poke. Habitat, North America,

south of Europe—Portugal to Greece, Africa—Barbary States. Flowers in autumn. Parts employed, the root, and the berries; the root should be collected late in the autumn or during winter, the berries when ripe. *Preparations*.—1. Tincture of the root corresponding in alcoholic strength with dilute alcohol, Process I. 2. Tincture of the berries with proof spirit, Process I. 3. Trituration of the dried root. N.B.—The tincture of the root should be dispensed when no other direction is given. *Dispensing forms*.— ϕ and upwards, tincture, tincture-trituration, pilules, or globules; or 1*x* to 3, trituration. *Not official*.—Tincture of the dried root. Am.H.P.—Tincture of the fresh root, Class III.

Phytolaccin. The resinoid obtained from *Phytolacca decandra*. *Preparation*.—Trituration.

Pilocarpia. (Ad.) (*Pilocarpine*.) The alkaloid existing in *Jaborandi* (*Pilocarpus pinnatifolius*). Gerard's process is as follows:—Prepare a soft extract of either the leaves or bark with proof spirit; digest this with water, filter, and wash. Evaporate the filtrate to a soft extract, cautiously add ammonia in slight excess, shake with chloroform, separate the latter, and evaporate. The residue is impure pilocarpine, which may be purified by re-resolution in acidulated water, and re-crystallization from chloroform. *Preparation*.—Solution in distilled water.

PILULES. The following directions are reprinted from the B.H.P., since the instructions now given are similar to those recommended in the first edition of the "Companion." The addition of water to moisten the pilules before medicating with a strong spirit tincture is most satisfactory. In the last Pharmacopœia it was also stated that pilules should not be medicated with a proof spirit tincture; therefore, such preparations as Aconite ϕ were not generally dispensed in that form; but since the publication of the "Companion," that also has been changed, and now pilules medicated with ϕ tinctures are admitted.

"In medicating the pilules and globules a suitable quantity of them should be placed in a bottle, and the tincture with which they are to be saturated should be poured over them in sufficient quantity to thoroughly moisten every

one of them ; and the regular admixture of the tincture and the pilules or globules should be insured by repeatedly shaking, or, better still, by grasping the bottle firmly and giving the hand a rapid circular motion, holding the bottle first perpendicularly and then horizontally. Some chemists fill the bottles with the tincture and leave the pilules and globules to macerate for several days ; while others carefully ascertain how much they will absorb, and add exactly that quantity. Whichever plan is followed, the greatest possible care is required to secure perfect saturation. The latter process, when carefully carried out, has the advantage of avoiding all exposure of the pilules and globules in drying ; whereas, if the former plan is followed, it is necessary after a time to pour off the excess of tincture, and to dry the pilules and globules between sheets of filtering paper—a plan which is objectionable on many accounts. It is found advantageous, in medicating pilules and globules with attenuations, which are usually prepared with strong alcohol, to make those required specially with 20 O.P. spirit, which will be more readily absorbed than stronger spirit. If, however, pilules or globules of a mother tincture or low attenuation prepared with stronger spirit than 20 O.P. are required, it is a better plan to avoid precipitation of the tincture through reduction of the spirit, by first adding about 10 or 15 minims of distilled water to each pound of pilules or globules, according to their hardness, and shaking them in the manner described, so that they may be uniformly moistened, and then setting them aside for a few minutes, when they will be found to absorb the strong spirit more readily. The requisite quantity of tincture should be added in two equal portions, allowing an interval of about twenty-four hours to elapse between each, so that the pilules or globules may dry before the second portion is added. On the other hand, when it is desired to medicate pilules or globules with a tincture which is of less alcoholic strength than 20 O.P. spirit—*e.g.* proof spirit—a sufficient quantity of rectified spirit to bring the strength up to 20 O.P. should first be added to the pilules or globules, and then the tincture, in two portions, as above described."

The following is taken from the first edition of our "Companion."

"In the 'Homœopathic Pharmacopœia' (1876 Edition), it is recommended that pilules should not be medicated with a tincture made of spirit weaker than 20 O.P. For medicating pilules with a tincture whose alcoholic strength is 20 O.P. proceed as follows:—Take of unmedicated pilules a sufficiency, and fill a round bottle three parts full, and for every ounce of pilules add 50 minims of the tincture, and well shake; or, better still, roll them horizontally in the hand, or on the counter, and set aside to dry. For pilules which are to be medicated with a tincture, or attenuation, made of a stronger spirit—i.e., 40 O.P. or upwards—it is better to have specially prepared pilules, as the ordinary kind, being very hard, will not readily absorb the tincture. To each pound of pure pilules in a bottle add 10 minims of distilled water, and roll horizontally as directed above. This will be sufficient to damp them, and they will then be in a condition to receive the tincture. From long experience we find this a better plan than reducing the alcoholic strength of the tincture, as recommended on p. 37 of the B.H.P., which in the case of strong resinous preparations will give a precipitate. Although pilules medicated with proof spirit tinctures are not official, we give the following method which answers very well, and as the ϕ pilules are frequently ordered, it is very desirable the chemist should be able to prepare them:—Take of unmedicated pilules a sufficiency, and to each ounce add 30 minims by measure of the tincture, and treat as before. In this case it is better to add 15 minims first, and when dry, the other 15 minims, being careful to roll them occasionally to prevent them adhering. One oz. of pure pilules will also absorb and retain 20 minims of a tincture made with dilute alcohol. After the medicine has been in contact with the pilules for about half an hour to one hour the cork should be loosened to allow the superfluous spirit, if any, to evaporate. N.B.—Unmedicated pilules should be obtained of the manufacturing homœopathic chemist, and not from a confectioner.

Pimpinella Saxifraga. N.O. Umbelliferae. Pimpinel,

Burnet Saxifrage. Habitat, dry meadows and pastures throughout Europe; abundant in Britain. *Preparation*.—Tincture of the fresh root, proof spirit. Am.H.P.—Tincture of the fresh root, Class III.

Piper Angustifolium. N.O. Piperaceæ. Matico. *Preparation*.—Tincture, proof spirit.

Piper Methysticum. N.O. Piperaceæ. *Syn.* Macropiper m. Kava Kava, or Ava. Habitat, South Sea islands. Used by the natives to form an intoxicating drink. Recommended for gonorrhœa and gout. *Preparation*.—Tincture of the root, rectified spirit. Am.H.P.—Tincture of the fresh root, Class III.

PLANTAGO MAJOR. N.O. Plantaginaceæ. Greater Plantain, Way-bread (corruption of way-bred). The Gaelic name signifies "healing plant," and that of the North American Indians "Englishman's foot." Habitat, Europe and North America. Flowers May to October. Parts employed, the fresh plant with the root when flowering commences. *Preparation*.—Tincture corresponding in alcoholic strength with proof spirit, Process I. *Dispensing forms*.— ϕ and upwards, tincture, tincture-trituration, pilules, or globules. Average loss of moisture 77 per cent. Am.H.P.—Tincture of the fresh plant, Class III.

PLATINA. (Platinum, Pt.) Platina. Obtained by precipitation from a dilute solution of perchloride of platinum by means of well-polished iron rods, upon which it is deposited as a spongy iron-grey mass, without lustre, soft, and light. *Preparation*.—Trituration. *Dispensing forms*.—1 \times to 3; trituration only. 4 and upwards, tincture, tincture-trituration, pilules, or globules. Am.H.P.—Trituration, Class VII.

Platina Muriatica. (Hydric Platonic Chloride, 2HCl . $\text{PtCl}_4 \cdot 6\text{H}_2\text{O}$.) *Syn.* Platini chloridum. Perchloride of Platinum. *Preparation*.—Solution in distilled water for 1 \times and 1, using dilute alcohol up to 2, and rectified spirit beyond 2. Am.H.P.—Solution in distilled water, Class V. b.

Platina Muriatica Natronata. (Sodic Platonic Chloride, or Sodium Chloroplatinate, $2\text{NaCl} \cdot \text{PtCl}_4 \cdot 6\text{H}_2\text{O}$.) *Syn.* Platini et natri chloridum. Prepared by mixing solutions

of perchloride of platinum and chloride of sodium, and evaporating. *Preparation*.—Solution in distilled water for 1x and 1, using dilute alcohol for 3x and 2, and rectified spirit for all above. Soluble in water and alcohol.

PLUMBUM. (Metallic Lead, Pb.) May be obtained chemically pure by igniting the carbonate or nitrate of lead and reducing with black flux the resulting oxide. It can be very easily pulverized by first beating it rather thin on an anvil, and then rubbing down with sugar of milk. *Preparation*.—Trituration. *Dispensing forms*.—1x to 3, trituration only; 4 and upwards, tincture, tincture-trituration, pilules, or globules. Am.H.P.—Trituration, Class VII.

PLUMBUM ACETICUM. (Normal Plumbic Acetate, Pb (C₂H₃O₂)₂.3H₂O.) *Syn.* Plumbi acetat. Acetate of Lead. The sugar of lead of commerce purified by solution in distilled water and re-crystallization. For characters and tests see B.P. *Preparations*.—Trituration; solution in distilled water for 1x, using dilute alcohol for 1, and rectified spirit for all above. N.B.—These preparations should be freshly made. *Dispensing forms*.—1x to 3, trituration; or 1x and 1, solution; 3x and upwards, tincture, tincture-trituration, pilules, or globules. Solubility, 10 in 25 of water, 1 in 20 of rectified spirit, 1 in 2 of glycerine. B.P. dose, 1 to 4 grains. Am.H.P.—Solution in distilled water, Class V. b; trituration, Class VII.

PLUMBUM CARBONICUM. (Plumbic Carbonate, PbCO₃.) *Syn.* Plumbi carbonas. Carbonate of Lead, Pure White Lead. For characters and tests see B.P. *Preparation*.—Trituration. *Dispensing forms*.—1x to 3, trituration only; 4 and upwards, tincture, tincture-trituration, pilules, or globules. Am.H.P.—Trituration, Class VII. Insoluble in water.

Plumbum Iodatum. (Plumbic Iodide, PbI₂.) *Syn.* Plumbi iodidum. Iodide of Lead of the B.P. *Preparation*.—Trituration. Am.H.P.—Trituration, Class VII.

Plumbum Nitricum. (Plumbic Nitrate, Pb2NO₃.) *Syn.* Plumbi nitras. Nitrate of Lead. For characters and test see B.P. *Preparation*.—Solution in rectified spirit for 1 and upwards.

PODOPHYLLIN. Resin of Podophyllum. Prepared according to the B.P. *Preparations.*—Trituration; solution in rectified spirit, 1 in 10, which constitutes the mother tincture. *Dispensing forms.*—1 to 3, trituration; or ϕ and upwards, tincture, tincture-trituration, pilules, or globules B.P. dose, $\frac{1}{4}$ to 1 grain.

PODOPHYLLUM PELTATUM. N.O. Ranunculaceæ. *Syn.* Anapodophyllum Canadense, Aconitifolius humilis, Podophyllum callicarpum. May apple, Mandrake, Wild Lemon, Ducksfoot. Habitat, Canada, Louisiana, and other parts of the United States. Part employed, the root. *Preparations.*—Tincture of dry root, using spirit of 20 O.P., Process I.; tincture of fresh root, prepared in, and imported from, North America. *Dispensing forms.*— ϕ and upwards, tincture, tincture-trituration, pilules, or globules. Average loss of moisture, 77 per cent. Am.H.P.—Tincture of the fresh root, Class III.

Polygonum Punctatum. N.O. Polygonaceæ. *Syn.* P. hydropiperoides, P. acre. American Smart-weed. This plant is closely allied to the water pepper of this country (Polygonum hydropiper, Linn.) It grows in nearly all parts of the United States, whence the tincture should be imported. *Preparation.* Tincture of the whole plant. Am.H.P.—Tincture of the fresh plant, Class III.

Polymnia Uvedalia. (Ad.) N.O. Compositæ. Bearsfoot. Found in west of New York to Illinois. It acts on the spleen. *Preparation.*—Whole-plant tincture.

Polyporus Officinalis. N.O. Fungi. [*Syn.* Boletus laricis, B. purgans. White, or Larch Agaric. A fungus growing on the larch tree in all countries. *Preparation.*—Tincture of the entire fungus, dilute alcohol.

Polyporus Pinicola. (Ad.) N.O. Fungi. Pine Agaric. This species of fungus grows upon the trunk of the white pine. Useful in intermittent fevers. *Preparations.*—Tincture or trituration of the *fresh* fungus.

Populus Tremuloides. N.O. Salicaceæ. American Aspen. Habitat, North America. *Preparation.*—Tincture of the inner bark. Am.H.P.—Tincture of the fresh inner bark, Class III.

Potency. See ATTENUATIONS.

Pothos. (*Symplocarpus Foetidus.*) N.O. *Orontiaceæ.* *Syn.* *Pothos foetida*, *Dracontium foetidum*, *Ictodes foetidus*. Skunk Cabbage. Habitat, United States. Part employed, the root. *Preparation.*—Tincture.

Prenanthus Serpens. See *NABALUS SERPENTARIA*.

PRESCRIPTIONS, *with examples.*—The forms in which homœopathic medicines are dispensed are Powders, Tinctures, Pilules, Globules and tincture-triturations.

The powders consist of sugar of milk, to which has been added a given quantity of the trituration prescribed, or the trituration itself, weighed out into powders, or the tincture is dropped on to the sugar of milk in a given number of drops. This form will not answer with any tincture made of a weaker strength spirit than proof, unless specially prepared as *tincture trituration*.

The tinctures are often dispensed in small bottles, with directions to the patient to take so many drops in so much water, or mix a number of drops in half a tumbler of water, and a spoonful for a dose. At other times the chemist is directed to make a mixture with distilled water, and send out in bottles in the usual way.

Pilules and globules are convenient forms for dispensing, and for the patient to carry about. The former are much used now, and the latter but seldom, at least in this country.

For directions for medicating, *see* under *PILULES* and *GLOBULES*.

Tincture triturations are very convenient for travellers, and for dispensing purposes. *See* under that head for making.

Homœopathic prescriptions differ greatly from those of the old school, and are more simple, containing in each powder, or mixture, only one medicine at a time. Each medicine should have its strength marked after it—for instance: *Belladonna* ϕ , *Bell.* 1*x*, *Bell.* 3*x*, *Bell.* 30, and so on, denoting the mother tincture, the first decimal, the third decimal, and the 30th centesimal attenuations.

After the sign the quantity follows, as—

Trit. Merc. Viv. 2*x* gr. ij = 2 grains of the 2nd decimal Trituration.

Pil. Bell. 3-3ij. = Two drachms of Bell. 3 pilules.

Tr. Merc. Sol. 5 gtt. ij = Two drops of Merc. Sol. 5 cent.

Tr. Trit. Bell. ϕ gr. j. = one grain of Tinct. Trit. of Bell. ϕ .

These may be written thus :—Bell. 3/3ii., gtt. 2/5, grs. 1/ ϕ .

Tr. Acon. N. 1 \mathfrak{x} gtt. xij.

Aquæ destill. 3viii. M.

Sig.—A tablespoonful, &c.

Here twelve drops of the first decimal attenuation of Aconite are mixed with the water and sent out in the ordinary way.

Tr. Nucis V. 3 \mathfrak{x} gtt. ij.

Sacchar. Lactis, gr. iv. M.

Fiat Pulvis. Mitte tales xij.

One powder to be taken, &c.

Here the tincture may be dropped on to the powder, and sent out in this way.

Tr. Merc. Sol. 5 3ij. No. 1.

Tr. Bellad. 3 3ij. No. 2.

Take one drop alternately every 3 hours.

Trit. Hepar. Sulph. 3 gr. ij.

Fiat Pulvis. Mitte tales vj et sig. ; 1, 3, 5, 7, 9, 11.

Tr. Trit. Bellad. ϕ gr. j.

Fiat Pulvis. Mitte tales vj. et sig. ; 2, 4, 6, 8, 10, 12.

One powder in the order numbered to be taken three times a day.

In this case it is intended the powders should be taken alternately, and they should be dispensed in a card box, the No. 1 being the first, and the others following in their order, that the patient may have no trouble.

Bell. 1 \mathfrak{x} gtt. xij.

Sacchar. Lactis, q.s. M.

Fiat pulvis. Mitte tales iv.

Sig.—One powder in three tablespoonfuls of water and take a tablespoonful every four hours.

The tincture here may be dropped on to, or rubbed up with, the sugar of milk (about 20 grains) in a glass mortar.

PRUNUS SPINOSA. (*Prunus communis*.) N.O. Rosaceæ.

Syn. *Prunus instititia*. Blackthorn, Sloe. Habitat, Europe, and Russian and Central Asia; abundant in Britain. Flowers are used for making the tincture, and should be collected in early spring. *Preparation*.—Tincture corresponding in alcoholic strength with proof spirit, Process I. *Dispensing forms*.— ϕ and upwards, tincture, tincture-trituration, pilules, or globules. Average loss of moisture, 72 per cent. Am.H.P.—Tincture of the fresh flower-buds, Class II.

Prunus Virginiana. *See CERASUS VIRGINIANA.*

Ptelea Trifoliata. N.O. Xanthoxylaceæ. Wafer Ash, Wing-seed, Shrubby Trefoil, Swamp Dogwood, Hop-tree. Habitat, North America, from Pennsylvania to Wisconsin, and southward. Part employed, the bark. *Preparation*.—Tincture, using rectified spirit, Process I. *Dispensing forms*.— ϕ and upwards, tincture, tincture-trituration, pilules, or globules. Am.H.P.—Tincture of the fresh bark, Class III.

PULSATILLA. (*Pulsatilla pratensis*.) N.O. Ranunculaceæ.

Syn. *Pulsatilla nigricans*, *Anemone pratensis*, *Herba venti*. Meadow Anemone, Pasque Flower, Wind Flower. Habitat, sandy pastures in Germany, France, Denmark, Sweden, Russia, and Turkey, and in some parts of the south of England. Flowering time, in spring, and again in August and September. Parts employed, the entire plant when in flower. The fresh plant tincture can be imported from Germany. *Preparation*.—Tincture corresponding in alcoholic strength with proof spirit, Process I. *Dispensing forms*.— ϕ and upwards, tincture, tincture-trituration, pilules, or globules. *Ad.*—Tincture of the dried herb. Am.H.P.—Tincture of the fresh plant, Class III.

PULSATILLA NUTTALLIANA. (*Anemone Nuttalliana*,

D.C.) N.O. Ranunculaceæ. *Syn.* *Anemone pratensis*, A. Ludoviciana. American Pulsatilla. Habitat, British America, valley of the Rocky Mountains, on the Missouri and Platte, Illinois. The entire plant is used, and should be collected when in flower in the spring. *Preparation*.—Tincture corresponding in alcoholic strength with proof spirit, prepared in, and imported from, North America.

Process I. *Dispensing forms.*— ϕ and upwards, tincture, tincture-trituration, pilules, or globules. Am.H.P.—Tincture of the fresh plant, Class III.

Pyrexin. (Ad.) *Syn.* Pyrogen. Sepsin. Dr. Drysdale gives the following mode of preparation :—Take half a pound of chopped lean beef, put into one pint of water from the tap, and macerate on the sunny side of a wall for two or three weeks, so that a pellicle may form and the maceration fluid assume a reddish, thick, and fetid appearance; strain through muslin and filter; evaporate the filtered liquid to dryness in a water bath at boiling heat. The dry residue, which forms a brown, caky mass, rub up in a glass mortar with 2 ounces of rectified spirit, and allow to digest for two hours; boil for five minutes this spirituous maceration, filter, and thoroughly dry in the warm chamber the residue that is on the filter, which forms a hard, brownish mass, weighing 54 grains. Rub this with 540 minims of distilled water; allow to stand an hour and a half, and then filter. This clear amber-coloured liquor which passes through is the watery extract or solution of sepsin. To this add double the volume—*i.e.*, 1080 minims of glycerine, and label Pyrexin, ϕ , which forms the standard solution of sepsin, of which 1 minim corresponds to the water extract of one-thirtieth of a grain of dry sepsin. The solution is amber-coloured, and remains perfectly clear throughout, and without any trace of mould fungi on the surface eight months after preparation. On testing by subcutaneous injection in white mice, in quantities from 1 minim upwards, and with simultaneous control experiments with like quantities of pure glycerine diluted with one-third water, it was found that 1, 2, and 3 minims produced palpable effects, though not fatal; while 4 minims were fatal in some cases, and 6 minims uniformly so, the corresponding control experiments being innocuous. As sepsin is of the nature, probably, of peptones, and extremely favourable to the growth of accidental bacteria, whose germs exist in all ordinary water, it should, if given internally, not be prescribed in an aqueous mixture, but dispensed in pure glycerine, or in glycerine with one-third of distilled water,

and the dose dropped into a spoonful of water at the time of administering.

Quassia. (Ad.) (*Quassia Amara*.) N.O. Simarubaceæ.
Syn. *Picræna excelsa*. Quassia Wood of the B.P. *Homœopathic preparation*.—Tincture, proof spirit.

Quebracho. (Ad.) (*Aspidosperma Quebracho*.) N.O. Apocynaceæ. White Quebracho. A Brazilian plant, used as a febrifuge, and in dyspnoea. *Preparation*.—Tincture.

Quillaja Saponaria. (Ad.) N.O. Rosaceæ. Soap Bark. Am.H.P.—Tincture of the bark, Class IV.

Quinina. *See* CHININUM.

Quininæ Arsenias. *See* CHININUM ARSENICUM.

Quininæ Bromidum. (Ad.) (Bromide of Quinine.)
Preparation.—Trituration. For Ague, &c.

Quininæ Carboles. (Ad.) Can be prepared by melting 4 parts of Quinine with 1 part of Carbolic Acid. Given for Diarrhoea in doses of 2 grains. (Squire.)

Quininæ Hydrobromas. (Ad.) Solubility 1 in 50 of water. *Homœopathic Preparation*.—No. 1 Solution, &c.

Quininæ Hydrochloras. *See* Chininum Muriaticum.

Quininæ Lactas. (Ad.) Soluble 1 in 6 of water. A solution, 1 in 4, can be made by neutralising Quinine with Lactic Acid. (Squire.) *Homœopathic Preparation*.—1 $\frac{1}{2}$ Solution, &c.

Quininæ Phosphas. (Ad.) Solubility 1 in 500 of water. More soluble in rectified spirit.

Quininæ Salicylas. *See* Chininum Salicylicum.

Quininæ Sulphas. *See* CHININUM SULPHURICUM.

Quininæ Valerianas. (Ad.) Solubility about 1 in 100 of water; 1 in 2 of rectified spirit. Ordinary dose, 1 to 3 grains. *Homœopathic Preparation*. No. 1 Solution, Trituration, &c.

Rana Bufo. *See* BUFO.

Ranunculus Acris. N.O. Ranunculaceæ. Buttercup, Upright Meadow Crowfoot. *Preparation*.—Tincture of the entire fresh plant, proof spirit. Average loss of moisture

70 per cent. Am.H.P.—Tincture of the fresh herb, Class I.

RANUNCULUS BULBOSUS. N.O. Ranunculaceæ. *Syn.*

R. tuberosus. Bulbous Crowfoot. Abundant in England, Ireland, and Southern Scotland. The entire fresh plant is used when in flower early in the summer. *Preparation.*—Tincture corresponding in alcoholic strength with proof spirit, Process I. It should be frequently prepared and carefully preserved. *Dispensing forms.*— ϕ and upwards, Tincture, tincture-trituration, pilules, or globules. Average loss of moisture, 70 per cent. Am.H.P.—Tincture of the fresh blooming plant, Class I.

Ranunculus Flammula. N.O. Ranunculaceæ. Lesser

Spearwort. Habitat, shore of Lake Ontario; rare. *Preparation.*—Tincture of the fresh herb, dilute alcohol. Am.H.P.—Tincture of the fresh herb, without the root, Class I.

Ranunculus Repens. N.O. Ranunculaceæ. Creeping

Crowfoot. Habitat, Europe and America. *Preparation.*—Tincture of the entire fresh plant, dilute alcohol. Average loss of moisture, 85 per cent. Am.H.P.—Tincture of the fresh herb, Class I.

RANUNCULUS SCCELERATUS. N.O. Ranunculaceæ.

Syn. Herba sardoa. Marsh Crowfoot, Celery-leaved Buttercup. Habitat, sides of pools and wet ditches, over nearly the whole of Europe and Russian and Central Asia; common in Britain. The fresh plant is used, and should be collected during the summer, when in flower. *Preparation.*—Tincture, corresponding in alcoholic strength with proof spirit, Process I. It should be frequently prepared and carefully preserved. *Dispensing forms.*— ϕ and upwards, tincture, tincture-trituration, pilules, or globules. Average loss of moisture, 79 per cent. Am.H.P.—Tincture of the fresh herb, Class III.

RAPHANUS. (*Raphanus Sativus.*) N.O. Cruciferræ.

Black Radish. Native of China; cultivated all over Europe. Time for collecting, immediately before flowering, in spring. *Preparation.*—Tincture of the fresh tuber, corresponding in alcoholic strength with proof spirit, Process I. *Dispensing Forms.*— ϕ and upwards, tincture,

tincture-trituration, pilules, or globules. Am.H.P.—
Tincture of the fresh root, Class III.

RATANHIA. (*Krameria triandra.*) N.O. *Krameriaceæ.*
Bhatany root of the B.P., imported from Peru and Bolivia.
Preparation.—Tincture, using proof spirit, Process I.
Dispensing forms.— ϕ and upwards, tincture, tincture-trituration, pilules, or globules.

Rectified Spirit. See SPIRITUS RECTIFICATUS.

RHEUM. (*Rheum Palmatum*, and other species.) N.O. *Polygonaceæ.* *Syn.* *Rhabarbarum.* Rhubarb root of the B.P., imported from Shanghai and Canton. Habitat, China, Chinese Tartary, and Thibet. For characters see B.P. *Preparation.*—Tincture, using proof spirit, Process I. *Dispensing forms.*— ϕ and upwards, tincture, tincture-trituration, pilules, or globules. B.P. dose of the powder, 5 to 20 grains. Am.H.P.—Tincture, Class IV.; trituration, Class VII.

RHODODENDRON. (*Rhododendron Chrysanthum.*) N.O. *Ericaceæ.* *Syn.* *R. officinale.* Golden-flowered Rhododendron. Native of Siberia and the Caucasus, also in Kamtschatka. Parts employed, dried leaves and flower buds. Time for collecting, when the flower buds are well developed but not opened. *Preparation.*—Tincture, using proof spirit, Process I. *Dispensing forms.*— ϕ and upwards, tincture, tincture-trituration, pilules, or globules. Am.H.P.—Tincture of the dried leaves, Class IV.

Rhododendron Opodeldoc. Recommended by the late Dr. Hering for rheumatism. Made as follows:—Simple opodeldoc, 9 parts; ϕ tincture of rhododendron, 1 part.

Rhus Aromatica. (Ad.) N.O. *Anacardiaceæ.* Fragrant Sumach. Habitat, dry, rocky soil, from Vermont westward and southward. Flowering time, April and May. Part employed, bark of the root. *Preparation.*—Tincture. Recommended in diabetes.

Rhus Glabra. N.O. *Anacardiaceæ.* Common Sumach; called also Smooth Sumach, Pennsylvania Sumach, and Upland Sumach. Indigenous to the United States. *Preparation.*—Tincture of the bark. Am.H.P.—Tincture of the fresh bark, Class III.

RHUS OPELDOC. Take of simple opodeldoc 9 fluid

ounces, and stir in 1 fluid ounce of ϕ tincture of rhus; pour into bottles, and allow to get cold.

RHUS RADICANS. N.O. Anacardiaceæ. Poison Vine.

"It seems still a disputed question whether this differs from *R. toxicodendron* in anything but habit, *Rhus tox.* being a dwarf, erect shrub, while *R. radicans* is a climber. Meantime, since they have been separately proved, and each proving contains symptoms peculiar to itself, it is much the best plan to make tinctures of each, and keep them separate."—B.H.P. *Preparation.*—Tincture, corresponding in alcoholic strength with 40 O.P. spirit, prepared in and imported from North America, Process I. *Dispensing forms.*— ϕ and upwards, tincture, tincture-trituration, pilules, or globules. Am.H.P.—Tincture of the fresh leaves, Class III.

RHUS TOXICODENDRON. N.O. Anacardiaceæ. *Syn.*

Vitis Canadensis. Poison Oak. Native of North America. Parts employed, the fresh leaves, collected in May and June, before flowering. It should be collected at sunset, and never exposed to the sun. Flowers in June and July. *Preparation.*—Tincture, corresponding in alcoholic strength with 40 O.P. spirit, prepared in, and imported from, North America, Process I. *Dispensing forms.*— ϕ and upwards, tincture, tincture-trituration, pilules, or globules. *Ad.*—Tincture of the dried leaves as imported, using 40 O.P. spirit. Am.H.P.—Tincture of the fresh leaves, Class III.

RHUS VENENATA. N.O. Anacardiaceæ. *Syn.* *Rhus*

vernix. Poison Sumach, Poison Elder, Varnish Tree. Habitat, in swamps; Canada and Northern States, Georgia, Louisiana, and Japan. Parts employed, young shoots, or the milky juice which exudes from incisions in the bark. Time for collecting, June to August. It should, like *rhus toxicodendron*, be collected at sunset. Flowers in June. *Preparation.*—Tincture, corresponding in alcoholic strength with 40 O.P. spirit, prepared in, and imported from, North America, Process I. *Dispensing forms.*— ϕ and upwards, tincture, tincture-trituration, pilules, or globules. Am.H.P.—Tincture of the fresh leaves and bark, Class III.

Ricinus Communis. N.O. Euphorbiaceæ. *Syn.* *Palma*

Christi. Castor Oil Plant. Parts employed: 1. The seeds; 2. The leaves. *Preparations*.—1. Tincture of the seeds, using rectified spirit; 2. Tincture of the leaves, using proof spirit. Am.H.P.—Tincture of the ripe seeds, Class IV.

Robinia. (*Robinia Pseud-acacia*.) N.O. Leguminosæ. False Acacia, Locust-tree. Indigenous to North America. Cultivated in Britain. *Preparation*.—Tincture of the root-bark, 20 O.P. spirit. Am.H.P.—Tincture of the fresh bark of the young twigs, Class III.

RUBINIS CAMPHOR. Equal parts of camphor and rectified spirit.

RUMEX CRISPUS. N.O. Polygonaceæ. Curled Dock, Yellow Dock. Abundant in Britain. Part employed: the fresh root; should be collected when flowering commences in summer. *Preparation*.—Tincture, corresponding in alcoholic strength with proof spirit, Process I. *Dispensing forms*.— ϕ and upwards, tincture, tincture-trituration, pilules, or globules. Average loss of moisture, 65 per cent. Am.H.P.—Tincture of the fresh root, Class III.

RUTA GRAVEOLENS. N.O. Rutaceæ. *Syn.* *R. hortensis et montana*. Common Rue. Habitat, South of Europe; naturalized in our gardens. Flowers June to September. Parts employed, the herbaceous parts, collected just after flowering has well commenced. *Preparation*.—Tincture, corresponding in alcoholic strength with proof spirit, Process I. *Dispensing forms*.— ϕ and upwards, tincture, tincture-trituration, pilules, or globules. Average loss of moisture, 71 per cent. Am.H.P.—Tincture of the fresh herb, Class I.

SABADILLA. (*Asagrea Officinalis*.) N.O. Melanthaceæ. *Syn.* *Veratrum sabadilla*, *Helonias off.* Cevadilla. Parts employed, the dried capsuled seeds, as imported from Vera Cruz. Native of Mexico. *Preparations*.—Tincture, using 20 O.P. spirit, Process I.; trituration. *Dispensing forms*.— ϕ and upwards, tincture, tincture-trituration, pilules, or globules; 1 α to 3, trituration. Am.H.P.—Tincture of the seeds, Class IV.

SABINA. (*Juniperus Sabina*.) N.O. Coniferæ. *Syn* *Sabina vulgaris*, *S. sterilis*. Savin. Habitat, South of Europe and the Levant; cultivated in this country. Parts employed, fresh leaves and points of shoots of cultivated plants, collected in April and May; also the oil distilled from the same. *Preparation.*—Tincture of the leaves and shoots, corresponding in alcoholic strength with 40 O.P. spirit, Process I.; solution of the oil in rectified spirit, forming 1*x*. N.B.—The 1*x* solution of this oil will be from 50 to 100 times the strength of the mother tincture of the leaves and shoots. *Dispensing forms.*— ϕ and upwards (or *Oleum Sabinæ* 1*x* and upwards), tincture, tincture-trituration, pilules, or globules. Average loss of moisture, 53 per cent. Am.H.P.—Tincture of the fresh tops, Class III.

SACCHARUM LACTIS. (Sugar of milk, $C_{11}H_{22}O_{12}$.) A crystallized sugar, obtained from the whey of milk by evaporation. It should answer the following characters:—
 “Usually in cylindrical masses, two inches in diameter, with a cord or stick in the axis, or in fragments of cakes; greyish-white, crystalline on the surface and in its texture, translucent, hard, scentless, faintly sweet, gritty when chewed. Soluble in about seven parts of water at common temperatures, and in about one part of boiling water.”
 Used in the attenuation of insoluble substances.

Salicinum. (Ad.) (*Salicin*, $C_{13}H_{18}O_7$.) A crystalline glucoside obtained from the bark of the *Salix alba*. For characters and tests, *see* B.P. Solubility, 1 in 28 of water, 1 in 60 of rectified spirit. *Homœopathic preparations.*—Trituration and solution. The medicinal properties are similar to those of sulphate of quinia. B.P. dose, 3 to 20 grains.

SAMBUCUS. (*Sambucus nigra*.) N.O. Caprifoliaceæ. Elder. Habitat, central and southern Europe; common in England and Wales. Flowers in early summer. Part employed, the fresh inner bark of the young branches, when flowers and young fruit are on the trees. *Preparation.*—Tincture, corresponding in alcoholic strength with proof spirit, Process I. *Dispensing forms.*— ϕ and upwards, tincture, tincture-trituration, pilules or globules.

Average loss of moisture, 66 per cent. Am.H.P.—Tincture of the fresh leaves and flowers, Class I.

SANGUINARIA. (*Sanguinaria Canadensis*.) N.O. Papaveraceæ. *Syn.* *S. grandiflora*. Blood Root, Red Root, Puccoon. Habitat, open woods, on light soils, Canada to Florida. Part employed, the rhizome, collected early in spring or late in autumn. *Preparations.*—Tincture, corresponding in alcoholic strength with proof spirit, Process I. *Dispensing forms.*— ϕ and upwards, tincture, tincture-trituration, pilules, or globules. *Ad.*—Tincture of the dried rhizome. Am.H.P.—Tincture of the fresh root, Class III.

Sanguinaris Nitras. (*Ad.*) (Nitrate of Sanguinarina.) A very fine, brownish-red powder, pungent, acrid, bitter, and inodorous. Soluble in alcohol, ether, water, and oils, but not in all proportions (Dr. Hale). *Preparations.*—Solution in dilute alcohol, 1 in 200, using rectified spirit for 3*x*, &c.; trituration.

Sanguinarin. The resinoid obtained from *Sanguinaria Canadensis*. *Preparation.*—Trituration.

SANTONINUM. (Santonin, $C_{18}H_{15}O_3$.) A crystalline neutral principle obtained from *Santonica*. For characters and tests see B.P. *Preparations.*—Trituration; solution in warm rectified spirit for 1. *Dispensing forms.*—1*x* to 3 trituration; or 1 and upwards, tincture, tincture-trituration, pilules, or globules. Solubility, 1 in 50 of rectified spirit; slightly in water. B.P. dose, 2 to 6 grains. Am.H.P.—Solution in alcohol, Class VI. *b*; trituration, Class VII.

SAPO ANIMALIS. (Curd Soap.) Made with soda and a purified animal fat consisting of about 60 per cent. of stearin. Employed in opodeldocs.

Sapo Durus. (Hard Soap of the B.P.).

Sapo Mollis. (Soft Soap of the B.P.).

Sarracenia Purpurea. N.O. Sarraceniaceæ. Huntsman's Cap, Pitcher Plant, Sidesaddle Flower. Habitat, wet and boggy places in North America. *Preparations.*—Infusion; tincture of the whole plant, including the root. Am.H.P.—Tincture of the fresh plant, Class III.

SARSA. (*Smilax Officialis*.) N.O. Smilacææ. *Syn.* *S. medica*, *S. Peruviana*. Sarsaparilla. Habitat, Central

America. Part employed, the dried root, as imported from Jamaica. For characters *see* B.P. *Preparations*.—Tincture, using proof spirit, Process I.; trituration. *Dispensing forms*.— ϕ and upwards, tincture, tincture-trituration, pilules, or globules; or 1x to 3, trituration. Am.H.P.—Tincture of the dried root, Class IV.; trituration of the dried root-bark, Class VII.

SCILLA. (*Urginea Scilla*.) N.O. Liliaceæ. *Syn.* *Scilla maritima*, *S. Hispanica*, *Ornithogalum scilla*. Squill, Sea Onion. Habitat, coasts of Mediterranean. *Preparation*.—Tincture of the fresh bulb, corresponding in alcoholic strength with proof spirit, Process II. *Dispensing forms*.— ϕ and upwards, tincture, tincture-trituration, pilules or globules. Average loss of moisture, 71 per cent. *Ad.*—Tincture of the dried bulb, as imported, using proof spirit. Am.H.P.—Tincture of the fresh bulb, Class III.

Scrophularia Aquatica. N.O. Scrophulariaceæ. Water Betony, Water Figwort. Parts employed, the entire plant, including the root. *Preparation*.—Tincture, dilute alcohol.

Scrophularia Marylandica. N.O. Scrophulariaceæ. The Fever Weed of North America. *Preparation*.—Tincture of the leaves.

Scrophularia Nodosa. N.O. Scrophulariaceæ. Knotted Figwort. Parts employed, the entire plant, including the root. *Preparation*.—Tincture, dilute alcohol. Am.H.P.—Tincture of the fresh plant, Class III.

Scutellaria Lateriflora. N.O. Labiatae. Mad Dog Skull-cap. Habitat, United States, in wet, shaded places. Flowers July and August. Parts employed, the whole plant. *Preparation*.—Tincture. *Ad.*—Tincture of the dried plant as imported. Am.H.P.—Tincture of the whole fresh plant, Class III.

Scutellarin. The resinoid of *Scutellaria lateriflora*. *Preparation*.—Trituration.

SECALE. (*Claviceps Purpurea*.) N.O. Fungi. *Syn.* *Secale cornutum*, *Acinula Clavus*, *Ergota*. Ergot of Rye, Spurred Rye. The sclerotium of *Claviceps purpurea* produced between the pales, and replacing the grain of *Secale cereale*, Linn. For characters *see* B.P. Time for collecting, immediate.
H.P. M

diately before the rye is harvested. *Preparations*.—Tincture of the freshly gathered ergot, using proof spirit, Process I.; trituration, which must be freshly made. Liquid Extract prepared as directed in the B.P., and introduced for the first time into the B.H.P. *Dispensing forms*.— ϕ and upwards, tincture, tincture-trituration, pilules, or globules; or 1 \times to 3, trituration; or Liquid Extract, ϕ . B.P. dose of ergot in powder, 20 to 30 grains; of the liquid extract, 10 to 30 minims; of the tincture, 5 to 30 minims. Am.H.P.—Tincture of the fresh ergot, Class III.

SELENIUM. (Se.) A non-metallic element, very analogous to sulphur in many of its chemical properties, obtained from several native metallic selenides by treating them with hydrochloric acid and igniting the washed and dried residue with black flux, dissolving out the resulting selenide of potassium with boiling water, and exposing the solution to the air. The selenium is deposited, and afterwards purified by washing, drying and distillation. *Preparation*.—Trituration. *Dispensing forms*.—1 \times to 3, trituration only; 4 and upwards, tincture, tincture-trituration, pilules, or globules. Am.H.P.—Trituration, Class VII.

Sempervivum Tectorum. (Ad.) Common House-leek. Habitat, the whole of Europe. Parts employed, the leaves. *Preparation*.—Tincture. Am.H.P.—Tincture of the fresh leaves, Class III.

SENECIO. (Senecio Aureus.) N.O. Compositæ. *Syn.* S. gracilis. Life-root, Golden Ragwort, Squaw-weed. Indian name, Uncum. Habitat, north and west of the United States. Parts employed, the entire plant, collected when in flower in May and June. Dr. Hale has satisfied himself as to the identity of S. aureus and S. gracilis, the latter being only a slender state of the former, "found on rocky shores." *Preparations*.—Tincture, corresponding in alcoholic strength with proof spirit, Process I.; trituration of the resinoid known as Senecin. *Dispensing forms*.— ϕ and upwards, tincture, tincture-trituration, pilules, or globules. Am.H.P.—Tincture of the entire fresh plant, Class III.

SENEGA. (Polygala Senega.) N.O. Polygalacæ. Rattlesnake Milkwort, Snakewort. Part employed, the dried root, as imported from North America. For characters

see B.P. *Preparation*.—Tincture, using proof spirit, Process I. *Dispensing forms*.— ϕ and upwards, tincture, tincture-trituration, pilules, or globules. Am.H.P.—Tincture of the dried root, Class IV.

SENNA. N.O. Leguminosæ. Alexandrian Senna of the B.P. The dried leaflets of *Cassia acutifolia* (*Delile*), and *Cassialanceolata* (*Nectoux*). It is imported from Alexandria, and sometimes in a more or less contaminated condition, in which case the true senna leaflets should be carefully separated from all extraneous matter. For characters *see* B.P. *Preparation*.—Tincture of the leaflets, using proof spirit. Am.H.P.—Tincture of the dried leaves, Class IV.

SEPIA. (*Sepia Officinalis*.) Sepia. Part employed, the peculiar secretion of this mollusc, which is called cuttlefish ink, brought to this country from the Mediterranean. It should be obtained still enclosed in the bag in which it has been dried. The prepared sepia of the painters will not do, as it has been acted upon by caustic potash. *Preparation*.—Trituration. *Dispensing forms*.—1x to 3, trituration only; 4 and upwards, tincture, tincture-trituration, pilules, or globules. Am.H.P.—Tincture, Class IV.; trituration, Class VII.

Sepsin. *See* PYREXIN.

Serpentaria. *See* ARISTOLOCHIA SERPENTARIA.

SILICEA. (Silicic Anhydride, SiO_2 .) *Syn.* Silicea Terra, Silica. Pure Flint, Silex. Hahnemann directs this to be prepared as follows:—"Take half an ounce of mountain-crystal and expose it several times to a red heat, or take pure white sand and wash it with distilled vinegar; when washed, mix it with 2 ounces of powdered natrum, melt the whole in an iron crucible until effervescence has ceased and the liquefied mass looks clear and smooth, which is then to be poured upon a marble plate. The limpid glass which is thus obtained is to be pulverized while warm, and to be filled in a phial, adding four times its own weight of distilled water (the phial being exactly filled to a level, and a stopper being put in immediately). This mixture forms a solution which remains always clear; but upon pouring it into an open phial, which is loosely covered with paper, it becomes decomposed, and the snow-white

silica separates from the natrum, and falls to the bottom of the phial." The following process, which does not differ in any essential particular from that of Hahnemann, and is practically the better one, is given in the B.H.P.:—"Take of silica, in powder, 1 part; dried carbonate of soda, 4 parts. Fuse the 4 parts of dry sodic carbonate in a clay crucible, and then gradually add to the fused mass the powdered silica, at each addition of which an escape of carbonic acid gas takes place, so that a roomy crucible should be used. When the carbonic acid gas is no longer given off, pour the fused mass upon a clean marble slab, and while it is slightly warm break it into small pieces, put it into a wide-mouthed bottle, and add sufficient distilled water to dissolve it, the stopper being capped with wet bladder. The following day the solution may be diluted and rapidly filtered through cotton-wool to purify from small pieces of dirt, &c.; then add to the filtered liquor hydrochloric acid, in small quantities, from time to time. The hydrated silica is precipitated in the form of a bulky, gelatinous, white precipitate, which is collected and washed with distilled water upon a filter. The washing must be continued until the filtrate possesses no taste, and only exhibits faint cloudiness with solution of nitrate of silver. The precipitate, when thoroughly washed, may be dried upon a porcelain water-bath, when it shrinks to an impalpable powder. The discovery of dialysis by the late Professor Graham has supplied a method by which a moderately strong solution of pure hydrated silica may be obtained. It is, however, more interesting than useful, as it will not keep, the silica becoming solid after a few days. *Characters and Tests.*—A white, amorphous powder, almost insoluble in water or dilute acids (except hydrofluoric acid), tasteless and odourless. If 10 grains be placed on a filter, and repeatedly washed with 2 fluid drachms of distilled water, the filtrate will exhibit only faint cloudiness upon the addition of nitrate of silver." *Preparation.*—Trituration. *Dispensing forms.*—1℥ to 3, trituration only; 4 and upwards, tincture, tincture-trituration, pilules, or globules. Am.H.P.—Trituration.

Silphium Laciniatum. N.O. Compositæ. Rosin Weed.

Compass Plant. Habitat, the prairies of Illinois and Wisconsin, from thence southward and westward. *Preparation*.—Tincture of the leaves. Am.H.P.—Tincture of the fresh herb in flower, Class III.

Sodii Bromidum. (Ad.) (Bromide of Sodium, B.P. Na. Br.) Mentioned in Hale's "New Remedies," but no preparation given. Solubility, 1 in $1\frac{1}{4}$ of water, 1 in 16 of rectified spirit.

Sodii Iodidum. See NATRI I.

Sodii Salicylatum. (Ad.) (Salicylate of Sodium of the B.P. $(\text{NaC}_6\text{H}_5\text{O}_2)_2, \text{H}_2\text{O}$.) Solubility, 1 in 1 of water, 1 in $4\frac{1}{2}$ of rectified spirit. Properties similar to the acid. *Preparation*.—Solution in either spirit or water. B.P. dose, 10 to 20 grains.

Sodii Sulphocarbolas. (Ad.) Sulphocarbolate of Sodium, B.P. $(\text{NaC}_6\text{H}_5\text{SO}_4, 2\text{H}_2\text{O})$ *Syn.* Natrum sulphocarbolicum. Solution in water. B.P. dose, 10 to 15 grains. Am.H.P.—Trituration.

Solanum Lycopersicum. N.O. Solanaceæ. *Syn.* L. esculentum. The Tomato. Habitat, South America. *Preparation*.—Tincture of the ripe fruit.

Solanum Mammosum. N.O. Solanaceæ. Nipple Nightshade. Habitat, West Indies and Central America. *Preparation*.—Tincture of the ripe fruit. Am.H.P.—Tincture of the fresh ripe berries, Class I.

SOLANUM NIGRUM. N.O. Solanaceæ. Black Nightshade. Habitat, widely spread over every part of the globe except the extreme north and south; rare in Scotland. It flowers the whole summer and autumn. Parts employed, the fresh herb, bearing ripe and unripe berries, collected in September and October. *Preparation*.—Tincture, corresponding in alcoholic strength with dilute alcohol, Process I. *Dispensing forms*.— ϕ and upwards, tincture, tincture-trituration, pilules, or globules. Average loss of moisture, 80 per cent. Am.H.P.—Tincture of the fresh herb, Class I.

Solutions—in Water, see LIQUORES; in Alcohol, see TINCTURÆ.

SPIGELIA. (Spigelia Anthelmia.) N.O. Loganiaceæ. *Syn.* Anthelminthia quadriphylla. Demerara Pinkroot,

Wormgrass. Habitat, South America, Brazil, southern and south-western United States. Part employed, the dried herb as imported. *Preparations*.—Tincture, using rectified spirit, Process I.; trituration. *Dispensing forms*.— ϕ and upwards, tincture, tincture-trituration, pilules, or globules, or 1x to 3, trituration. Am.H.P.—Tincture of the dried herb, Class IV.

SPIRITUS RECTIFICATUS. (Rectified Spirit.) Alcohol, C_2H_5HO , with about 12 per cent. of water; obtained by the distillation of fermented saccharine fluids. This is the *Re-distilled* 60 O.P. alcohol used in Homœopathic Pharmacy, has a specific gravity of 0.829, and should answer the B.P. *Characters and Tests*, viz.:—Colourless, transparent, very mobile and inflammable, of a characteristic pleasant odour, and a strong spirituous burning taste. Burns with a blue flame without smoke. Remains clear when diluted with distilled water. A little rubbed on the back of the hand leaves no unpleasant smell after the spirit has evaporated. Four fluid ounces with thirty grain-measures of the volumetric solution of nitrate of silver exposed for twenty-four hours to bright light, and then decanted from the black powder which has formed, undergoes no further change when again exposed to light with more of the test. In making and attenuating the tinctures the following strengths will be required and should be ready for use:—

Dilute Alcohol.—Made by mixing equal parts by measure of rectified spirit 60 O.P. and distilled water. *Test*.—Specific gravity, 0.940, and contains about 40 per cent. by weight of absolute alcohol.

Proof Spirit.—Made by mixing ten parts by measure of rectified spirit 60 O.P. with 7 parts by measure of distilled water. *Test*.—Specific gravity, 0.920, and contains about 49 per cent. by weight of absolute alcohol.

Spirit of 20 degrees over proof.—Made by mixing 6 parts by measure of rectified spirit 60 O.P. with 2 parts by measure of distilled water. *Test*.—Specific gravity, 0.895, and contains about 60.2 per cent. by weight of absolute alcohol.

Spirit of 40 degrees over proof.—Made by mixing 7 parts by measure of rectified spirit 60 O.P., with 1 part

by measure of distilled water. *Test*.—Specific gravity 0·865, and contains about 73 per cent. by weight of absolute alcohol.

Homœopathic Chemists should procure a Sikes's Hydrometer for spirit, range from 60° over proof to about 40° under proof, in order to verify the different degrees of alcohol.

SPONGIA TOSTA. (*Spongia Officialis*.) Class, Porifera. Turkey Sponge. "The horny skeleton of at least two species of sponge imported in the dry state. Care must be taken to select a specimen which has not been prepared by bleaching, as for the toilet, and to free it from all foreign substances. Before using it, it must be cut into small pieces, and roasted until it has become brown and friable, and can be readily reduced to powder." B.H.P. *Preparations*.—Trituration; tincture, using 20 o.p. spirit. *Dispensing forms*.—1x to 3, trituration; or ϕ and upwards, tincture, tincture-trituration, pilules, or globules. Am.H.P.—Tincture, Class IV.; trituration, Class VII.

STANNUM. (Metallic Tin, Sn.) The chemically pure metal beaten into the thinnest foil. *Preparation*.—Trituration. *Dispensing forms*.—1x to 3, trituration only, 4 and upwards, tincture, tincture-trituration, pilules, or globules. Am.H.P.—Trituration, Class VII.

STAPHISAGRIA. (*Delphinium Staphisagria*.) N.O. Ranunculaceæ. Palmated Larkspur, Stavesacre, of the B.P., where *see* Characters and Tests. Habitat, South of Europe. *Preparation*.—Tincture of the seeds, using rectified spirit, Process I. *Dispensing forms*.— ϕ and upwards, tincture, tincture-trituration, pilules, or globules. Am.H.P.—Tincture of the ripe seed, Class IV.

STICTA. (*Sticta Pulmonaria*.) N.O. Lichenes. *Syn.* *Lobaria pulmonaria*, *Lichen pulmonarius*, *Sticta pulmonacea*, *Pulmonaria reticulata*. Lungwort, Lichen, Tree Lungwort, Oaklungs. Habitat, New England, New York, Pennsylvania, and Carolina, U.S.; northern and mountainous counties of England, on the trunks of large trees. The entire plant is used for making a tincture, corresponding in alcoholic strength with proof spirit, Process I. *Dispensing forms*.— ϕ and upwards, tincture, tincture-

trituration, pilules, or globules. Am.H.P.—Tincture of the fresh lichen, Class IV.

STILLINGIA. (*Stillingia Sylvatica.*) N.O. Euphorbiaceæ. Queen's-root, Queen's Delight, Yaw-root, Silver-leaf. Habitat, Virginia to Florida, and in Mississippi and Louisiana. Part employed, the root. *Preparation.*—Tincture, corresponding in alcoholic strength with proof spirit, Process I. *Dispensing forms.*— ϕ and upwards, tincture, tincture-trituration, pilules, or globules. Am.H.P.—Tincture of the fresh root, Class III.

STRAMONIUM. (*Datura Stramonium.*) N.O. Solanaceæ. *Syn.* *D. lurida*, *Solanum maniacum*. Thorn Apple, Devil's Apple, Jamestown Weed. Habitat, Europe, Asia, and North America; frequent among rubbish heaps in the south of England. Flowers in the summer and autumn. Parts employed, the entire herb, collected when there are both flowers and fruit. *Preparation.*—Tincture, corresponding in alcoholic strength with proof spirit, Process I. *Dispensing forms.*— ϕ and upwards, tincture, tincture-trituration, pilules, or globules. Ad.—Tincture of the seeds, proof spirit. Average loss of moisture, 78 per cent. Am.H.P.—Tincture of the ripe seed, Class IV.

STRONTIUM CARBONICUM. (Strontic Carbonate, SrCo_3 .) *Syn.* *Strontianæ carbonas*, *Strontiana carbonica*. Carbonate of Strontia. *Preparation.*—Trituration. *Dispensing forms.*—1 \times to 3, trituration only; 4 and upwards, tincture, tincture-trituration, pilules, or globules. Am.H.P.—Trituration, Class VII.

Strophanthus. (Ad.) The seeds of *Strophanthus hispidus*. Contains an active principle, *Strophanthin*. Is a cardiac tonic — Homœopathic preparation. — Tincture, &c.

Strychninæ Arsenias. (Ad.) Arseniate of Strychnia. *Preparation.*—Trituration. Solution in alcohol or water. Suggested in intermittent disorders.

STRYCHNINUM. (Strychnine, or Strychnia, $\text{C}_{21}\text{H}_{22}\text{N}_2\text{O}_5$.) An alkaloid prepared from *Nux Vomica*. For characters and tests *see* B.P. A very active poison. *Preparations.*—Trituration; solution in 20 o.p. spirit, 1 grain in 200 minims. One measure of this solution, mixed with 4

measures of 20 O.P. spirit, will form the 3 \times attenuation. Rectified spirit is used for all above. *Dispensing forms.*—1 \times to 3, trituration; or 1 in 200 and upwards, tincture, tincture-trituration, pilules, or globules. Solubility, 1 in 5,760 of water; insoluble in cold alcohol. B.P. dose, $\frac{1}{32}$ to $\frac{1}{12}$ grain. The seeds of *ignatia* yield a larger proportion of strychnia than *nux vomica*. Am.H.P.—Trituration.

STRYCHNINUM NITRICUM. (Strychnic Nitrate, $C_{21}H_{22}N_2O_2 \cdot HNO_3$.) Nitrate of Strychnia. Prepared by neutralizing a very weak solution of nitric acid with pure strychnia and crystallizing. A very active poison. *Preparation.*—Solution in dilute alcohol for 1, using rectified spirit for all above. *Dispensing forms.*—1 and upwards, tincture, tincture-trituration, pilules, or globules. Am.H.P.—Trituration, Class VII.

STRYCHNINUM PHOSPHORICUM. (Acid Phosphate of Strychnine, or Strychnia, $C_{21}H_{22}N_2O_2 \cdot H_3PO_4 \cdot 2H_2O$.) Phosphate of Strychnia. Prepared by dissolving pure strychnia in moderately diluted phosphoric acid and crystallizing. A very active poison. *Preparation.*—Solution in dilute alcohol for 1, using rectified spirit for all above. *Dispensing forms.*—1 and upwards, tincture, tincture-trituration, pilules, or globules. Am.H.P.—Trituration, Class VII.

STRYCHNINUM SULPHURICUM. (Normal Sulphate of Strychnine, or Strychnia, $(C_{21}H_{22}N_2O_2)_2 \cdot H_2SO_4 \cdot 7H_2O$.) Sulphate of Strychnia. Prepared by neutralizing diluted sulphuric acid with pure strychnia and crystallizing. A very active poison. *Preparation.*—Solution in distilled water to which 5 per cent. of rectified spirit has been added for 1, using dilute alcohol for 3 \times , and rectified spirit for all above. *Dispensing forms.*—1 and 3 \times , solution only; 2 and upwards, tincture, tincture-trituration, pilules, or globules. Am.H.P.—Trituration, Class VII.

Sugar of Milk. See *Saccharum Lactis*.

SULPHUR. (Common Brimstone, S.) The well-known Flowers of Sulphur carefully washed with distilled water and dried in the air. *Preparations.*—Trituration; saturated solution in absolute alcohol, which must be labelled *Tinctura Sulphuris Fortissima*. "N.B.—Since a permanent solution of 1 grain of sulphur cannot be effected at a tem-

perature of 60°F. in less than 2,720 grain measures of absolute alcohol, sp. gr. 0.7979, and precipitation takes place on the least fall of temperature, thereby rendering the solution extremely weak and indefinite in strength, it will be seen that no satisfactory attenuations are obtainable from the above solution. In future it will be recognized by the name above given.”—(B.H.P.) *Dispensing forms.*—1 \times to 3, trituration only; 4 and upwards, tincture, tincture-trituration, pilules, or globules. *Tinctura sulphuris fort.*: tincture, tincture-trituration, pilules, or globules. *Am.H.P.*—Trituration, Class VII.; tincture with 95 per cent. alcohol, Class VI. *b*.

SULPHUR IODATUM. (Sulphur Iodide, S_2I_2 .) *Syn.* Sulphuris iodidum. Iodide of Sulphur. Prepared as directed in the B.P., where also *see* characters and tests. *Preparation.*—Trituration. *Dispensing forms.*—1 \times to 3, trituration only; 4 and upwards, tincture, tincture-trituration, pilules, or globules. Solubility, 1 in 60 of glycerine; insoluble in water. *Am.H.P.*—Trituration, Class VII.

SUMBUL. (Ferula (Euryangium) Sumbul.) N.O. Umbelliferae. *Syn.* Sumbulus moschatus, Jatamansi. Musk Root. “Till recently the botanical source of sumbul root was unknown. It has been used in the East as a perfume and incense in religious ceremonies, as well as medicinally. It is usually taken to St. Petersburg, and from thence to other parts of Europe.”—(B.H.P.) Part employed, the root, as imported from Turkestan. For characters and tests *see* B.P. *Preparations.*—Tincture, using proof spirit, Process I.; trituration. *Dispensing forms.*— ϕ and upwards, tincture, tincture-trituration, pilules, or globules; 1 \times to 3, trituration. *Am.H.P.*—Tincture of the dried root, Class IV.

SYMPHYTUM OFFICINALE. N.O. Boraginaceae. Common Comfrey. Habitat, moist banks and borders of meadows in Europe and Western Asia; frequent in England and Ireland. Part employed, the fresh root-stock, collected before flowering and in the autumn; flowers in spring and summer. *Preparation.*—Tincture, proof spirit. Average loss of moisture, 75 per cent. *Am.H.P.*—Tincture of the fresh root, Class III.

SYRUP. *See* Syrupus.

SYRUPUS. Syrup (B.P.) Take of refined sugar 5 pounds, distilled water 2 pints. Dissolve the sugar in the water with the aid of heat; and add, after cooling, as much distilled water as may be necessary to make the weight of the product seven pounds and a half. The specific gravity should be 1.330.

TABACUM. (*Nicotiana Tabacum.*) N.O. Solanaceæ. Tobacco. Habitat, America. *Preparation.*—Tincture of the fresh leaves, collected before the flowers are developed, corresponding in alcoholic strength with dilute alcohol, Process I. *Dispensing forms.*— ϕ and upwards, tincture, tincture-trituration, pilules, or globules. Average loss of moisture, 84 per cent. Am.H.P.—Tincture of the dried leaves, Class IV.

TAMUS. (*Tamus Communis.*) N.O. Dioscoreaceæ. Black Bryony. Habitat, hedges and open woods and bushy places in West Central and Southern Europe, extending to the Caucasus; common in England. Flowers in spring and early summer. Part employed, the fresh root. *Preparation.*—Tincture, corresponding in alcoholic strength with proof spirit, Process II. The ϕ tincture only has been hitherto used as an outward application. Much recommended for chilblains; to be painted on the part affected. Average loss of moisture, 76 per cent. Am.H.P.—Tincture of the fresh root, Class I.

TANACETUM VULGARE. N.O. Compositæ. Tansy. Habitat, edges of fields, roadsides, and waste places in Europe and Russian Asia; common in Britain. Parts employed, the fresh plant, when in flower at the end of summer. *Preparation.*—Tincture, corresponding in alcoholic strength with 20 o.p. spirit, Process I. *Dispensing forms.*— ϕ and upwards, tincture, tincture-trituration, pilules, or globules. Am.H.P.—Tincture of the fresh leaves and blossoms, Class III.

Tanghinia Venenifera. (Ap.) N.O. Apocynaceæ. The Madagascar Poison Nut. *Preparation.*—Tincture of the berry.

TARAXACUM. (*Taraxacum Dens-leonis.*) N.O. Compositæ. *Syn.* *Leontodon taraxacum*, *Taraxacum officinale*. Dandelion. A very common weed throughout Europe, Russia and central Asia, and northern America. Time for collecting, spring, before the commencement of flowering. *Preparation.*—Tincture of the entire plant, corresponding in alcoholic strength with proof spirit, Process I. *Dispensing forms.*— ϕ and upwards, tincture, tincture-trituration, pilules, or globules. Average loss of moisture, 76 per cent. Am.H.P.—Tincture of the whole plant with the root, Class I.

TARENTULA. (*Lycosa Tarentula.*) *Syn.* *Aranea tarentula*. *Tarentula*. Habitat, Italy and south of Europe. Parts employed, the entire living spider. *Preparation.*—Tincture, by maceration for ten or twelve days in proof spirit. "The animals should be first crushed in a mortar, and then covered with half the requisite quantity of spirit, triturated for a few minutes, and the mixture transferred to a macerating bottle. The mortar and pestle should then be washed with the remainder of the spirit, the washing poured into the bottle, and the latter well shaken daily."—(B.H.P.) Am.H.P.—Tincture, Class VI. *b*.

Tarentula Cubensis. (Ad.) The Cuban Spider. *Preparation.*—Tincture of the whole live spider; trituration. Recommended for chorea.

Taxus Baccata. N.O. Taxaceæ. Common Yew. Parts employed, the young shoots. *Preparation.*—Tincture, 20 O.P. spirit. Average loss of moisture, 59 per cent. Am.H.P.—Tincture of the fresh leaves, Class II.

Taxus Erecta. N.O. Taxaceæ. Upright Irish Yew. This shrub, with erect branches, is a garden variety of the common yew. *Preparation.*—Tincture of the young shoots, 20 O.P. spirit. Average loss of moisture, 60 per cent.

TELLURIUM. (Tellurium, Te.) May be obtained very easily by heating to whiteness in a covered crucible a mixture of equal weights of the powdered tellurium ore of Chemnitz, in Saxony, and dry carbonate of soda. The fused mass is dissolved in water, and the solution, when

freely exposed to the air, deposits the tellurium, which may be purified by washing, drying and distillation. *Preparation*.—Trituration. *Dispensing forms*.—1x to 3, trituration only; 4 and upwards, tincture, tincture-trituration, pilules, or globules. Am.H.P.—Trituration, Class VII.

Teplitz. This Bohemian "indifferent thermal" water has been proved.

TEREBINTHINA. (Oleum Terebinthinæ, $C_{10}H_{16}$.) Oil of Turpentine. The oil distilled from the oleo-resin (turpentine) obtained from several species of *Pinus*, purified by repeated rectification with water. Solubility, 1 in 7 of rectified spirit. *Preparation*.—Solution in rectified spirit for 1x and upwards. *Dispensing forms*.—1x and upwards, tincture, pilules, or globules. Am.H.P.—Solution in alcohol, Class VI. b.

TEUCRIUM. (Teucrium Marum.) N.O. Labiatae. *Syn.* Marum verum, M. Syriacum, Marjorana Syriaca. Cat Thyme. Habitat, the Levant, and all along the Mediterranean; also cultivated in gardens. Flowers June to August. Parts employed, the entire herb, fresh or dry. Time for collecting, when in flower and young seed. *Preparation*.—Tincture, corresponding in alcoholic strength with proof spirit, Process I. *Dispensing forms*.—φ and upwards, tincture, tincture-trituration, pilules or globules. Am.H.P.—Tincture of the fresh plant, Class I.

Thaspium Aureum. (Ad.) N.O. Umbelliferae. *Syn.* Zizia Aurea. American Meadow Parsnip. Habitat, moist river banks of America. Flowering time, June. Part employed, the root. *Preparation*.—Tincture.

Thea Chinensis. N.O. Ternstroemiaceae. *Syn.* T. viridis, Camellia thea. Green Tea. *Preparation*.—Tincture of the leaves as imported, using proof spirit. Am.H.P.—Tincture of the Pekoe tea, Class IV.

THERIDION. (Theridion Curassavicum.) Black Spider of Curaçao. Habitat, West Indies. Found on orange trees. Part employed, the entire living spider. *Preparation*.—Tincture, by maceration for ten or twelve days in proof spirit. It is recommended to use 1 spider to every 50 minims of proof spirit. The animals should be first

crushed in a mortar, and then covered with half the spirit, triturated for a few minutes, and the mixture transferred to a macerating bottle. The mortar and pestle should then be washed with the remainder of the spirit, the washings poured into the bottle, and the latter well shaken daily. *Dispensing forms.*— ϕ and upwards, tincture, tincture-trituration, pilules, or globules. Am.H.P.—Tincture of the live spider, Class IV.

Thlaspi Bursa Pastoris. (Ad.) N.O. Cruciferae. *Syn.* Capsella bursa pastoris. Shepherd's Purse. Native of Europe. Tincture of the fresh plant. Am.H.P.—Same, Class II.

THUJA. (Thuja Occidentalis.) N.O. Coniferae. *Syn.* Arbor Vitæ, Cedrus lycea. American Arbor Vitæ. Habitat, Canada and United States; cultivated as an evergreen. Parts employed, the young shoots, at the commencement of flowering in May and June. *Preparation.*—Tincture, corresponding in alcoholic strength with 20 o.p. spirit, Process I. *Dispensing forms.*— ϕ and upwards, tincture, tincture-trituration, pilules, or globules. Average loss of moisture, 58 per cent. Am.H.P.—Tincture of the fresh leaves, Class II.

Thymol. (Ad.) (Thymol, $C_{10}H_{13}HO$.) Derived principally from *Thymus vulgaris*. For Characters and Tests, see B.P. Dissolves freely in alcohol, slightly in water, and about 1 in 200 of glycerine. Is a powerful antiseptic. *Preparation.*—Tincture with rectified spirit.

Tilia Europæa. N.O. Tiliaceæ. The Lime Tree. *Preparation.*—Tincture of the flowers. Am.H.P.—Tincture of the fresh blossoms.

TINCTURÆ. (Tinctures.) Tinctures are solutions in spirit of vegetable, animal or mineral substances—the vegetable predominating to a large extent—spirit being used because in most cases the active principles are only partially, if at all, soluble in water; and again, because aqueous solutions readily decompose. In homœopathic pharmacy we have several processes—viz., *Percolation, Maceration and Percolation, Maceration, Solution*, as the *tincture of Benzoic acid, tincture of Iodine, &c.*, and lastly by mixture, as the *tincture of Hydrocyanic acid, tincture of Muriate of Iron, &c.*

PROCESS I.

Percolation, in the case of dry substances,* except those directed to be made by *Maceration*, such as gums, resins, &c. Strength 1 in 10. Ten minims of the tincture to represent the extractive matter of one grain of the dry herb.

Maceration and Percolation, in the case of fresh plants,† Strength 1 in 10, 1 in 15, 1 in 20, 1 in 25, or 1 in 30, as the process will admit. 10, 15, 20, 25, or 30 minims of the tincture to represent the extractive matter of one grain of the same herb in its dry state.

PERCOLATION.

Take of the dry substance, in powder, 2 troy ounces, spirit of the required strength, 20 fluid ounces. Pack the powder in a percolator,‡ and having poured on the spirit, proceed *secundum artem*. When the liquid ceases to pass, subject the contents of the percolator to pressure, filter the product, mix the two liquids and add sufficient spirit to make one pint.§ There will always be a certain amount of spirit to be added, owing to the impossibility of expressing the whole of the fluid from the drug. If the process is properly conducted, this will not weaken the tincture, for it will be found that in efficient percolation the last portion of spirit is almost, if not quite, colourless, and should taste only of alcohol, the first portions having exhausted the drug. This is the clearest indication of the success of the manipulation. The foregoing process is really the British

* The strength of homoeopathic mother tinctures is, with few exceptions, one in ten; each exception will be found under the remedy in the Dictionary.

† Where possible ten minims of a tincture made from the fresh plant should represent the extractive matter of one grain of the herb in its dry state; should however the plant contain so large an amount of moisture as to render this strength impossible, then a weaker tincture is made.

‡ Mr. Sanger recommends (*Pharmaceutical Journal*, 1864) either powdered glass or sand to form the filter bed of the percolator, the former being expensive, the latter being objected to on account of impurity. He suggests the purification of the sand by treatment with hydrochloric acid, and subsequent washings with distilled water.

§ Or the percolation may be continued until the required quantity is obtained in the same way as the tinctures by percolation are made in the United States Pharmacopœia.

Pharmacopœia method, for we use the percolator recommended by Dr. Redwood, in which case maceration takes place previous to the percolation. His article on Percolation* is so clearly written, and gives so much information with regard to the method of *preparing* and *packing* the percolator, and the time occupied in macerating previous to percolation, that we quote very extensively from this authority.

According to Parrish, the first application of the process of percolation or displacement was in the preparation of coffee by the French. Its first application to pharmacy appears to be in 1833, and due to M. Boullay and Son, French pharmaciens, and is now adopted by several of the Pharmacopœias. The process was first brought under the notice of the Pharmaceutical Society by Mr. Deane.

Dr. Redwood says : "In conducting the process of percolation, the solid substances operated upon are required to be in a uniform and rather minute state of division, so that they may admit of being so packed in the percolator that the spaces between the separate pieces of solid matter shall not be very sensibly greater than the natural spaces existing in the tissues of which the substances are composed. The more finely divided the solid substance is, provided that when packed in the percolator it will admit of percolation, the more perfect will the process be ; but some vegetable substances, when in a finely divided state, and in contact with the menstruum, become compacted into so dense a mass that the liquid will not pass, and therefore the process does not admit of application in such cases, under the most favourable circumstances and with the best results. The reduction of the solid substances *to the most suitable state of division, and the packing of these with the proper amount and kind of pressure*, involve the exercise of much judgment and skill. A filter-bed is to be formed of uniform structure throughout, capable of absorbing and holding the liquid menstruum by capillary attraction, and permitting of slow but uninterrupted percolation

* *Ph. Journal*, April 6, 1864. On the Process of Percolation, by Dr. Redwood (F.C.S.), Professor of Chemistry and Pharmacy to the Pharmaceutical Society.

equally through every part of the mass, under the influence of hydrostatic pressure."

Dr. Redwood considers that although it is desirable the solid substances should be reduced to as fine a state as possible, yet this must differ according to the nature of the substance to be operated upon, and according to the form of percolator used, and it is impossible, therefore, to give any fixed rules. The remarks made by Mr. Haselden are much to the point. He says: "A good manipulator will percolate (in the strict sense of the word) with almost anything, from a bottle with the bottom knocked out to the finest conical or cylindrical percolator; but a bad, unobservant manipulator will never percolate well at all."

After reviewing the cylindrical and conical percolators, we may conclude, from Dr. Redwood's observations, the latter is the best, and is the form now generally adopted.*

The following rules are also gathered from the same article:—

Pack the powder in the dry state, and "so closely and tightly that the spaces between the masses are not very sensibly greater than those within the masses." Usually allow some time to elapse after adding the first portion of spirit before commencing the percolation, the time allowed being from two to twelve hours.

And one may conclude from his remarks that, where the solid substances to be acted upon are of a "dense or horny nature," and the reduction to the state of small particles difficult, maceration, or at least maceration previous to percolation, will be found most efficient.

* In the U.S.P., 1882 edition, both the conical and cylindrical form is used, and the drug is to be moistened previous to percolation. For example, (1) Tincture of *Serpentaria* as follows:—*Serpentaria* in powder ten parts, diluted alcohol a sufficient quantity to make one hundred parts. Moisten the powder with ten parts of diluted alcohol, and macerate for twenty-four hours; then pack it firmly in a cylindrical percolator, and gradually pour diluted alcohol upon it, until *one hundred parts* of tincture are obtained. (2) Tincture of squill: Squill in powder 15 parts, diluted alcohol a sufficient quantity to make 100 parts. Moisten the powder with twenty parts of diluted alcohol, and macerate for twenty-four hours; then pack it moderately in a conical percolator, and gradually pour diluted alcohol upon it until 100 parts of tincture are obtained.

The process is not merely one of percolation, but of displacement, and this fact goes far to prove its advantage over other methods, because by displacing the first portion of spirit by the second, it brings the solid ingredients into contact with fresh or unsaturated spirit. This process of displacement, however, is not perfect, owing to the tendency of all liquors to diffuse one with the other; and the attempt frequently made to displace the tincture in the percolator by means of water should never be resorted to in homoeopathic pharmacy owing to the difference in their gravity, and the tendency in the spirit to rise in the water when in contact with each other. It will be better to adopt the British Pharmacopœia Process—viz., when the fluid ceases to pass, to subject the contents of the percolator to pressure and filter the product, which may be done through the filter-bed of pounded glass or sand in the percolator, which falls and mixes with the fluid in the receiver, adding sufficient spirit as before stated.

Dr. Redwood in illustrating the process, refers to the use of the "very convenient glass percolator made by the York Glass Company, and takes the preparation of essence of ginger as one of the best examples.

"A piece of straining-cloth having been tied over the lower end of the conical vessel at (A), a layer of white sand, about half-an-inch thick, is put on the strainer to form a filter bed, and over this is laid the powdered ginger, which, as it is introduced, should be *well rammed down with a wooden rod or other suitable instrument*. Having thus introduced the ginger (B) to the extent of, say a pound, and carefully packed it, so that it should be equally compressed in all parts, and free from any loose or vacant spaces, a layer of sand (C) may be put over the surface of the ginger to prevent it being disturbed when the spirit is introduced. A cork shive is now introduced to facilitate the pouring in of the spirit without disturbing the filter bed. The spirit is poured by means of a guide-rod on to the cork, and spreading over the powder, forms a column (D) above it—the cork floating and dispersing the stream as the spirit rises. A pint of rectified spirit may be used for this purpose, and this, when introduced, should

be gradually and equally absorbed by the ginger, passing downwards and forming a visible line, which affords a good indication of how far the packing of the ginger has been dexterously performed. If the powder has been well packed and equally compressed, the line as it descends will form an even and horizontal ring round the vessel; if, on the other hand, one part of the powder is less compressed than another, the spirit will pass there more quickly than elsewhere, and the line will be uneven or not horizontal."

"When it has passed to the bottom, and the whole of the powder has absorbed as much spirit as it is capable of holding, the percolation may be either suspended or proceeded with at once."

"It is sometimes considered desirable to suspend the percolation for a short time, or to slacken the flow of the liquid, and the apparatus admits of adjustment so as to accomplish these objects by a very ingenious, simple, and economical contrivance, which constitutes the peculiar feature in this percolator. The lower end of the conical vessel in which the percolation is effected is ground very accurately into the mouth of the receiver, and the glass stopper is in like manner ground accurately into the mouth of the conical vessel. It is obvious that these being fixed in their places, and fitting air-tight, the passage of the liquid from the upper to the lower vessel would be prevented by the pressure of the air below, and the resistance to exhaustion exerted above the liquid; but this impediment would at once be removed if air could escape from the lower vessel and could at the same time enter the upper vessel as the percolation proceeds. Now provision is made for allowing or stopping the passage of air by two grooves cut in the glass, as shown at E E. One of these grooves is cut in the mouth of the vessel, and the other in the stopper that fits into it. Neither of the grooves extends more than halfway through the stoppered part—the one passing through the upper and the other through the lower half; and therefore, unless they be brought in a line, they will not communicate, and there will be no passage for air. By turning the stopper, the grooves may be connected or



In ordering a percolator from the York Glass Company, take care to obtain one as above illustrated, without a tap in the receiver, for although this is convenient for drawing off the contents, it is quite inadmissible in homoeopathic pharmacy. Unless the cork round the tap, by means of which it is fixed, be changed with each different preparation, one tincture will be contaminated with the other.

separated, and this may be done wholly or partially, so that the passage of air may be allowed to take place freely or slowly, or not at all, by adjusting the relative positions of these grooves, and the flow of the liquid is thus brought completely under control."

Dr. Redwood considers "one of the most important advantages of the process of percolation or displacement to be *economy of time*, as a tincture may be prepared in a few hours, which by maceration would require a week or two."

FRESH PLANT TINCTURES.*

Maceration and Percolation.—Take of the fresh herb, rectified spirit 60 O.P., and distilled water, of each a sufficient quantity. Bruise the herb thoroughly in a stone mortar, and having ascertained the percentage of moisture† con-

* Fresh plant tinctures are official in the French, German and American Pharmacopœias. Dorvault in "L'Officine de Pharmacie Pratique," under the head of "Alcoolatures" describes them as follows:—"Alcohol charged by maceration with the soluble principles of plants in the fresh state. These are the tinctures of fresh plants of the Codex. . . . The "Alcoolatures" have a homœopathic origin; we owe them to Hahnemann himself. The mother tinctures of homœopathic physicians are in effect "alcoholatures." The proportions are: Equal parts of the fresh plants gathered at the beginning of flowering, and of alcohol at 90°, and maceration for ten days. After which it is strained with pressure and filtered. (Codex.) Alcohol at 90° ought to be employed in order to compensate the loss of strength, by the water of vegetation of the plants.

We estimate the water in a more systematic manner, and calculate accordingly the quantity of spirit to be added in order to form with it the given alcoholic strength required for the tincture.

The U. S. Ph. gives the following, under "Tincturæ Herbarum Recentium":—"Take of the fresh herb, bruised or crushed, *fifty parts*; alcohol, *one hundred parts*. Macerate the herb with the alcohol for fourteen days, then express the liquid and filter."

† After most of the remedies in the dictionary, the average percentage of moisture is given, and this can be verified by weighing a portion of the pulp and drying it in a water-bath, after which it should again be weighed, the loss being estimated as water by weight. It will be better to weigh and dry about 1,000 grains in order that the operator may be sure it represents thoroughly the condition of the mass. If a small quantity only is used, there is a greater risk of taking a portion deprived of some of the juice, which will be found at the bottom of the mortar or vessel which contains it.

tained therein, to each 8 ounces (avoirdupois) of the pulp, add the quantity of water and spirit given after each percentage in the subsequent tables, proceeding as follows :— Add sufficient of the spirit* to form with the water in the plant the alcoholic strength required for making the tincture : macerate this in a closed vessel for three days with occasional agitation. Then transfer to a percolator, and continue the percolation with the remainder of the water and spirit, previously mixed, until the liquid ceases to pass, after which subject the contents of the percolator to pressure, and filter the product, mix the two liquids, making good the deficiency by the addition of the same degree of alcohol, or the percolation may be continued until the required quantity has been obtained. We consider this a better process with fresh plant tinctures than percolation alone, for the following reason ; if the moist magma is put at once into the percolator and spirit poured in, the process being one of displacement, the watery juice will descend, owing to the pressure exerted by the spirit above it, and will be found to contain but little if any alcohol. Such being the case, the subsequent portions of spirit and water added will be stronger than that required for the preparation of the tincture, and the magma deprived of its water will be acted upon by too strong a spirit. By the plan advocated here the spirit will mix with the water of the plant during maceration, and when the magma is transferred to the percolator the liquid portion will be displaced by alcohol of the same degree. Many fresh plant tinctures occasion the Pharmacist some trouble by continually depositing sediment after standing a while. The deposit is peculiar to this class of preparations, and consists principally of glutinous and albuminous matter, and may be removed by filtration without depriving the tincture of its medicinal virtues.

* The proportion of spirit and water required in making the different strengths will be found on page 166, under "Spiritus Rectificatus." In the case of viscid herbs, "the solid ingredients form a tenacious mass, and the liquid will sometimes not percolate through this, or will percolate very slowly, so that it becomes necessary to mix the ingredients with coarse sand or pounded glass, to separate the particles and facilitate percolation. (Redwood.)

The following proportions form the basis from which to calculate the quantity of water and spirit (60 O.P) to make the different degrees of alcohol for the fresh plant tinctures, and have been used in the tables which follow :—

40 O.P. Spirit.	350	{ measures of spirit require }	58	{ of water and condenses to }	400
20 O.P. "	300	"	110	"	400
Proof "	250	"	162	"	400
Dilute "	206½	"	206½	"	400

At 60 F.

PROCESS II.

Is a modification of process I., and will be found necessary where the fresh plant contains much mucilaginous or viscid juice so that it is with difficulty the liquid will percolate through it. In such cases Dr. Redwood recommends coarse sand or pounded glass to be mixed with the ingredients, to separate the particles and facilitate percolation, *see* note, p. 182. After the herb is reduced to a pulp, weighed and percentage of moisture, strength and quantity of spirit ascertained as in process I., the magma should be placed in a wide-mouthed bottle and about one third of the spirit poured over it, allowing it to macerate forty-eight hours with occasional agitation. Then decant the liquid, press out the remainder preserving the liquid in a cool place till the process is completed. Mix in a mortar the pressed magma with about twice its bulk of coarse sand or pounded glass, and pack in the percolator pouring over the remainder of the spirit and closing the valves for twelve hours, when percolation may be allowed to proceed. When the liquid ceases to drop, again press the magma, mix the separate quantities and after a week filter.

The following herbs require to be treated in this way :—
Agaricus Muscarius, *Allium Cepa*, *Allium Sativum*, *Cactus Grandiflorus*, *Colchicum Autumnale*, *Cyclamen Europæum*, *Tamus communis*, *Viola Odorata*, *Viola Tricolor*, *Taxus Baccata*, and *Viscum Album*.

TABLES.

Showing the quantity of distilled water and 60 o.p. spirit to be added to 8 ounces avoirdupois (3500 grains) of moist magna to make a tincture of dilute, proof, 20 o.p., or 40 o.p. spirit, and the strength of the tincture resulting therefrom, which in most cases will be 1 in 10; but where the moisture in the plant is large, it may be weaker. In these tables the contraction, owing to the mixture of spirit and water, is taken into account, and the quantity of water in grains and the same in minims is also given. To find the quantity of tincture the 8 ounces of moist magna will make, it will be necessary to multiply the number of dry grains by 10 should the strength be 1 in 10; or 15, if 1 in 15, and so on, the product being tincture in minims. For example, take the top line opposite 45 per cent., in which we have 1925 dry grains. Now this should produce 19250 minims of a 1 in 10 tincture. The 8 ounces of pulp contains 1730 minims of water, and to form dilute spirit, we add 8203 minims more water, plus 9983 of spirits of wine 60 o.p., making a total of 19966, but owing to the contraction which takes place it will measure the required quantity, being 618 less than it appears on paper.

Percentage of moisture lost in drying and used as water.	Dry grains contained in 8 oz. of pulp.	W. in grains in 8 oz. of pulp.	W. in minims in 8 oz. of pulp.	Dilute alcohol.		Proof spirit.		Amount of water and spirit in minims to be added to each 8 oz. of pulp to form dilute alcohol and the strength of tincture resulting.		20 o.p. spirit.		40 o.p. spirit.	
				W. + Sp.	Strength	W. + Sp.	Strength	W. + Sp.	Strength	W. + Sp.	Strength	W. + Sp.	Strength
45	1925	1575	1730	8203+9983	1 in 10	6086+12031	1 in 10	3563+14437	1 in 10	1061+16843	1 in 10		
46	1890	1610	1769	7983+9732	"	6886+11812	"	3428+14176	"	971+16637	"		
47	1855	1645	1807	7764+9571	"	6705+11693	"	3294+13912	"	883+16231	"		
48	1820	1680	1846	7545+9391	"	6525+11575	"	3169+13650	"	793+15925	"		
49	1785	1715	1884	7326+9210	"	6345+11456	"	3024+13387	"	699+15617	"		
50	1750	1750	1923	7107+9030	"	6164+10937	"	2889+13125	"	614+15312	"		
51	1715	1785	1961	6888+8849	"	4994+10718	"	2757+12963	"	526+15008	"		
52	1680	1820	2000	6668+8668	"	4804+10500	"	2620+12800	"	496+14700	"		
53	1645	1855	2038	6450+8488	"	4624+10281	"	2486+12537	"	347+14398	"		
54	1610	1890	2077	6230+8307	"	4443+10063	"	2350+12375	"	257+14087	"		
55	1575	1925	2115	6012+8127	"	4263+9843	"	2191+12112	"	168+13781	"		
56	1540	1960	2154	5792+7946	"	4083+9625	"	2081+11860	"	41+13476	"		
57	1505	1995	2192	5573+7765	"	3903+9406	"	1946+11597	"				
58	1470	2030	2231	5354+7585	"	3722+9187	"	1811+11025	"				
59	1435	2065	2269	5135+7404	"	3543+8968	"	1677+10762	"				

60	1400	2100	2308	4916 + 7224	"	3362 + 8760	1542 + 10500	"
61	1365	2135	2346	4697 + 7043	"	3182 + 8331	1407 + 10237	"
62	1330	2170	2385	4477 + 6882	"	3001 + 8312	1272 + 9975	"
63	1285	2205	2423	4259 + 6692	"	2821 + 8083	1133 + 9712	"
64	1260	2240	2462	4039 + 6501	"	2641 + 7875	1003 + 9450	"
65	1225	2275	2500	3821 + 6321	"	2461 + 7666	888 + 9187	"
66	1190	2310	2539	3601 + 6140	"	2280 + 7437	733 + 8931	"
67	1155	2345	2577	3382 + 5959	"	2100 + 7218	589 + 8662	"
68	1120	2380	2616	3163 + 5779	"	1920 + 7000	464 + 8400	"
69	1085	2415	2654	2944 + 5598	"	1740 + 6781	339 + 8137	"
70	1050	2450	2693	2725 + 5418	"	1559 + 6562	194 + 7875	"
71	1015	2485	2731	2506 + 5237	"	1379 + 6343	60 + 7612	"
72	980	2520	2770	2288 + 5056	"	1199 + 6125		"
73	945	2555	2808	2068 + 4876	"	1019 + 5906		"
74	910	2590	2847	1848 + 4696	"	838 + 5687		"
75	875	2625	2885	1630 + 4515	"	658 + 5468		"
76	840	2660	2924	1410 + 4334	"	478 + 5250		"
77	805	2695	2963	1191 + 4153	"	298 + 5031		"
78	770	2730	3001	972 + 3973	"	117 + 4812		"
79	735	2765	3039	753 + 3792	"	1498 + 6890		1 in 15
80	700	2800	3078	534 + 3612	"	1172 + 6562		"
81	665	2835	3116	315 + 3431	"	923 + 6234		"
82	630	2870	3155	95 + 3250	"	672 + 5906		"
83	595	2905	3193	1412 + 4605	1 in 15	421 + 5578		"
84	560	2940	3232	1102 + 4334	"	170 + 5250		"
85	525	2975	3270	793 + 4063	"	982 + 6562		1 in 20
86	490	3010	3309	483 + 3792	"	680 + 6125		"
87	455	3045	3347	135 + 3521	"	398 + 5687		"
88	420	3080	3385	949 + 4334	1 in 20	14 + 5250		"
89	385	3115	3424	549 + 3973	"			"
90	350	3150	3463	149 + 3612	"			"
91	315	3185	3501	562 + 4063	1 in 25			"
92	280	3220	3540	72 + 3812	"			"
93	245	3255	3578	224 + 3792	1 in 30			"
94	210	3290	3617	176 + 3792	1 in 35			"

In making the first decimal attenuations from the mother tinctures, care should be taken to use the same strength spirit as the mother tincture itself, and the proportions will vary according to the strength of the tincture. If it should be 1 in 10 then 1 part to 9 of spirit will form the first decimal, but on the other hand should the tincture be 1 in 20 then 2 parts to 8 will be used, and so on.

PROCESS III.—MACERATION.

This is the process of the London Pharmacopœia, and consists in placing the solid and liquid ingredients (usually in the proportion of 1 ounce (troy) to 10 ounces spirit, unless otherwise stated in the "Dictionary" in a glass-stoppered bottle. These are allowed to stand 14 days (in the B.P. only 7) with frequent agitation. The drug to be acted upon must be reduced either to a coarse powder or cut into small pieces, and here the nature of the substance must be the guide, for if too fine in some instances (such as gums or resins) it will form a dense mass at the bottom of the vessel, which no amount of shaking will remove. This process is open to some objections, one being the necessity for frequent agitation, which, if not regularly attended to, "the liquid immediately in contact with the solid matter at the bottom of the macerating vessel forms a saturated solution, which, being more dense than the liquid above it, prevents the contact and solvent action of the latter. It is on this account that the vessel is directed to be frequently shaken during the maceration; but when large vessels are employed, agitation is not easily effected, and, under any circumstances, the repetition of this very necessary part of the process is liable to be neglected."

Maceration, as modified by Dr. Burton:—"It differs from the ordinary plan of maceration in the adoption of an arrangement for suspending the solid ingredients near the top of the liquid, instead of allowing them to subside to the bottom. This is effected, either by having a perforated diaphragm midway between the top and bottom of the macerating vessel in which the ingredients are put, or by enclosing the ingredients in a bag and suspending this bag by a string."

"The advantages of this method of conducting the process as compared with the other are, that there is no necessity for shaking the vessel, and that the exhaustion of the ingredients is effected in a shorter time. The process is automatic. When the spirit begins to act on the solid, a coloured tincture will be 'seen to gravitate through the

colourless and lighter spirit by which it is surrounded—the latter at the same time ascending and coming into contact with the solid matter. A descending and ascending current is thus established throughout the fluid, and continues until no more soluble matter is extracted.”—*Redwood*.

PROCESS IV.—SOLUTION.

Take of the drug and spirits of wine of the required degree, of each a sufficient quantity. Where the drug is soluble 1 in 10, the drug is dissolved in the spirit, so that when the solution is complete the whole shall measure 10 fluid ounces. Exceptions to the 1 in 10 strengths are given under the particular remedy in the “Dictionary.”

PROCESS V.—BY MIXTURE.

Take of the solution to be diluted and spirits of wine of the degree required, of each a sufficient quantity, and mix as directed under the particular remedy in the “Dictionary.”

In the American Homœopathic Pharmacopœia the Hahnemannian plan of preparing tinctures is recommended, and the percolator is not used. The process consists in mixing equal parts of juice and alcohol, three parts of the plant and two parts of alcohol, one part of the plant to two parts of alcohol, and so on. This was the method advocated by Hahnemann, and we believe in this country is still preferred by a few of his followers. In America it is, we think, invariably adopted, and the different processes are given on page 4. In conclusion we should like to say a few words concerning the source from which medicinal plants are obtained, particularly those from which the fresh herb tinctures are prepared.

Indigenous plants should be collected in the wild state, and all tinctures, with few exceptions, directed to be prepared from fresh plants which do not grow naturally here, should be imported. Among the exceptions are, *Sabina*, *Aconite*, *Cannabis sativa*, the cultivated plants of which have been found to yield excellent tinctures, but in each

case the habitat, and directions where to obtain, are distinctly given under each medicine, and should be followed.

Attempts have been made at different times to acclimatize plants for pharmaceutical purposes, but without any satisfactory result. The experiment, we believe, has been tried with those used in homœopathic pharmacy, and here again without success. Even the American Arbor Vitæ, which grows well in this country under cultivation, gradually died away, being choked by the surrounding weeds. Take any of the herbs used in medicine which are not found wild in this country, and place them in position and soil, however suitable, *without further attention*, and in a year or so they will be difficult to find at all.

Professor A. R. Wallace, in an article entitled, "The Debt of Science to Darwin," writes very forcibly on this subject. He says:—"Every one who has tried it knows the difficulty or impossibility of getting foreign plants, however hardy, to take care of themselves in a garden, as in a state of Nature. Wherever we go among the woods, mountains, and meadows of the temperate zone, we find a variety of charming flowers growing luxuriantly amid a dense vegetation of other plants, none of which seem to interfere with each other. By far the larger number of these plants will grow with equal luxuriance in our gardens, showing that peculiarities of soil and climate are not of vital importance; but not one in a thousand of these plants *ever runs wild with us, or can be naturalized by the most assiduous trials*; and if we attempt to grow them *under natural conditions* in our gardens, *they very soon succumb* under the competition of the plants by which they are surrounded. It is only by constant attention, not so much to them as to the neighbours, by pruning and weeding close around them, so as to allow them to get a due proportion of light, air, and moisture, that they can be got to live. Let any one bring home a square foot of turf from a common or hill-top, containing some choice plant growing and flowering luxuriantly, and place it in his garden untouched, in the most favourable conditions of light and moisture, and in a year or two it will almost certainly disappear, killed out by the more vigorous

growth of other plants. The constancy of this result, even with plants removed only a mile or two, is a most striking illustration of the preponderating influence of organism on organism—that is, of the struggle for existence. The rare and delicate flower which we find in one field or hedgerow, while for miles around there is no trace of it, maintains itself there, not on account of any speciality of soil or aspect, or other physical conditions being directly favourable to itself, but because in that spot only there exists the exact combination of other plants and animals which alone is not incompatible with its well-being, that combination perhaps being determined by local conditions or changes which many years ago allowed a different set of plants and animals to monopolize the soil, and thus keep out intruders. Such considerations teach us that the varying combinations of plants characteristic of almost every separate field or bank, or hillside, or wood throughout our land, is the result of a most complex and delicate balance of organic forces—the final outcome for the time being of the constant struggle of plants and animals to maintain their existence.”—*Century Magazine* (January, 1883).

TINCTURE-TRITURATIONS are preparations of sugar of milk saturated with the tincture, and so adjusted that each grain shall represent 1 minim, and may be prepared as follows:—Take of sugar of milk 1 ounce (437·5 grains) and place in a water-bath; then pour on this 1 fluid ounce of the tincture; mix well with an ivory spatula, and apply a gentle heat until the whole is thoroughly dry. Reduce this to a powder in a mortar, and then weigh, making the total up to 480 grains with sugar of milk, and again transfer to the mortar, and triturate the whole for half an hour. It will be seen by this method that no matter what the strength of the tincture, each grain will represent the extractive matter of *one minim of the tincture*.

Titanium. (Ti.) A rare metal, having a considerable analogy to tin. The substance used in the proving was obtained from the bottom of one of the furnaces at the Low Moor Iron Works in Yorkshire, in a crystalline form. These crystals have been shown to consist of a combination of cyanide with nitride of titanium. Hence they should be

preferred to the pure metal. *Preparation*.—Trituration. Am.H.P.—Trituration, Class VII.

Tongo. (*Dipterix Odorata*.) N.O. Leguminosæ. *Syn.* *Baryosma tonga*, *Coumarouna odorata*. Tonka, or Tonquin Bean. Habitat, Guiana. *Preparation*.—Tincture of the bean, using rectified spirit.

Trifolium Pratense. (Ad.) N.O. Leguminosæ. Common Red Clover. Habitat, largely cultivated everywhere. Parts employed, the ripe flowers. *Preparation*.—Tincture.

Trifolium Repens. (Ad.) N.O. Leguminosæ. Small White Clover. Habitat, fields and copses everywhere. Parts employed, the ripe flowers. *Preparation*.—Tincture.

Trillium Pendulum. N.O. Trilliaceæ. *Syn.* *Trillium album*. White Beth-root, Ground Lily. Found in the United States. *Preparation*.—Tincture of the root. Am. H.P.—Tincture of the fresh root, Class III.

Triosteum Perfoliatum. N.O. Caprifoliaceæ. Fever-root, Fever-wort, or Wild Ipecac. Habitat, rich woodlands of the United States. The root is the most active part. *Preparation*.—Tincture of the root. Am.H.P.—Tincture of the fresh root, Class III.

Triticum Repens. (Ad.) N.O. Creeping Couch Grass. *Homœopathic preparation*.—Tincture of the fresh rhizome deprived of the rootlets collected in spring.

TRITURATIONS. Triturations are attenuations with sugar of milk. According to Hahnemann, the efficacy of many substances altogether depends on the efficient *dynamization*, or the development of power by means of rubbing or succussion. Merely mixing in a mortar by roughly rubbing the materials together will not suffice, the object being to thoroughly diffuse the medicine throughout the non-medicinal substance. In the case of *Lycopodium*, for instance—which is generally considered by the old school of practitioners to be inert—by trituration the sporules are broken and discharge a peculiar oil which is taken up and diffused through the whole mass and becomes in the hands of the homœopathic practitioner a valuable remedy.

In the early days of Homœopathic Pharmacy, many of the vegetable drugs, and nearly all the non-vegetable

remedies, such as animal substances, mineral bodies, and chemical products, were prepared by trituration. Of late years such medicines only as are insoluble in either alcohol or water are usually attenuated by this process. There are exceptions, however, to this rule, as in some cases the medicine is prepared in both forms, tincture and trituration, for example, *Nux Vomica*. The substance used to dilute or attenuate is sugar of milk, and Hahnemann's directions were as follows: "Of these pulverized substances (the drugs to be operated upon in fine powder) you take one grain; mercury may be used in the liquid state. Place this grain in an unglazed porcelain mortar, then you take 33 grains of sugar of milk, and mix them with the drug by tritulating the mass with some force for about six minutes by means of a porcelain pestle; before you triturate, stir the mass for a little while with a spatula (bone or ivory). Having triturated the mass, you stir it again for about four minutes, scraping up that part which covers the bottom of the porcelain mortar, and also that which adheres to the pestle; then you triturate again with great force for six minutes, without however adding anything new. This mass you scrape up again, for four minutes, add another thirty-three grains of sugar of milk, stir the new compound for a moment with the spatula, then triturate it for six minutes with the pestle, scrape it up for four minutes, triturate again with great force for six minutes, scrape the mass up again for four minutes, then add the last thirty-three grains of sugar of milk, and with this last added portion proceed as with the two former. The trituration is now finished, and should be bottled and labelled No. 1, or 1 in 100 (1 cent.). It will be seen that the process lasts one hour." According to Jahr's Pharmacopœia many physicians have lately preferred making all the first triturations in the proportion of 10 in 100. This is the decimal scale now generally adopted, and the directions for preparing are similar to Hahnemann's, except that the proportions are 1 to 9. We give the two scales in tables:—

Decimal Scale by Weight.

1 part of the pure sub- stance	} to 9 parts of sugar of milk forms $\frac{1}{x}$ {						1st decimal.
1 part of $\frac{1}{x}$	"	9	"	"	"	"	$\frac{2}{x}$ } 2nd deci- mal or 1st centesimal.
1 " $\frac{2}{x}$	"	9	"	"	"	"	$\frac{3}{x}$ } 3rd deci- mal.
1 " $\frac{3}{x}$	"	9	"	"	"	"	$\frac{4}{x}$ } 4th deci- mal or 2nd centesimal.
1 " $\frac{4}{x}$	"	9	"	"	"	"	$\frac{5}{x}$ } 5th deci- mal.
1 " $\frac{5}{x}$	"	9	"	"	"	"	$\frac{6}{x}$ } 6th deci- mal or 3rd centesimal.

Centesimal Scale. By weight.

1 part of the pure substance	} to 99 parts of sugar of milk forms 1 cent., or {						$\frac{2}{x}$
1 part of 1 centesimal	"	99	"	"	"	"	2 " " { $\frac{4}{x}$
1 part of 2 centesimal	"	99	"	"	"	"	3 " " { $\frac{6}{x}$

Triturations are not usually carried beyond this attenuation. See directions for converting triturations into tinctures, page 52.

N.B.— $1x$, $3x$, and $5x$, are sometimes called A, B, and C.

Triturations are now official in the U.S.Ph., and are directed to be prepared as follows:—Take of the substance ten parts, sugar of milk in moderately fine powder ninety parts. Weigh the substance and sugar of milk separately; place the substance, previously reduced, if necessary, to a moderately fine powder, in a mortar; add about an equal bulk of sugar of milk; mix well by means of a spatula and triturate them thoroughly together. Add fresh portions of the sugar of milk from time to time until the whole is added, and continue the trituration until the substance is intimately mixed with the sugar of milk and finely comminuted.

Trombidium. (*Trombidium Muscæ Domesticæ.*) A bright red mite, found under the wings of the common house-fly in Philadelphia. *Preparation.*—Tincture of the entire mite, using proof spirit. Am.H.P.—The same, Class VI. *b.*

Turnera Aphrodisiaca. (Ad.) Damiana. Habitat, near the western coast of Mexico. Parts employed, the leaf and stem. Time for collecting, August. *Preparation.*—Tincture.

Tussilago Farfara. N.O. Compositæ. Coltsfoot. Recommended for chronic coughs and other pulmonary complaints. *Preparation.*—Tincture, &c.

Tussilago Petasites. N.O. Compositæ. *Syn.* Petasites vulgaris. Butter Bur. *Preparation.*—Tincture of the young plant, dilute alcohol. Average loss of moisture, 85 per cent. Am.H.P.—Tincture of the fresh plant, Class III.

Tutee. See CORIARIA RUSCIFOLIA.

Ulmus Campestris. N.O. Ulmaceæ. Common Elm, Broad-leaved Elm. Part employed, the inner bark of two-year-old branches. *Preparation.*—Tincture, using proof spirit.

UNGUENTA. Ointments, which may be prepared in various ways:—1. With prepared lard alone; this has the disadvantage of soon becoming rancid. 2. With spermaceti ointment (*Unguentum cetacei*) prepared as follows:—Spermaceti, 5 ounces; white wax, 2 ounces; almond oil, 1 pint, or a sufficiency. Melt together with a gentle heat, remove the mixture, and stir constantly while it cools. 3. Should a firm ointment or cerate (*Ceratum simplex*) be required, the following proportions are preferable:—Take of spermaceti, 3 ounces; white wax, 6 ounces; olive oil, 14 fluid ounces. Melt the spermaceti and wax in a water-bath, stir in the oil, and when cool, but not set, gradually add the medicating tincture, and stir briskly till cold. 4. A simple ointment (*Unguentum simplex*) may be prepared in the following manner:—Take of white wax, 2 ounces; prepared lard, 3 ounces; almond oil, 3 fluid ounces. Melt the wax in the oil in a water-bath, then remove the mixture, and stir constantly while it cools.

URANIUM NITRICUM. (Uranic Nitrate, o^{r} Uranyl Nitrate, $(\text{UO}_2)^{\text{r}}(\text{NO}_3)_2 \cdot 6\text{H}_2\text{O}$.) *Syn.* Uranii nitras. Nitrate of Uranium. The metal uranium is generally procured from Pitchblende. The nitrate may be obtained by treating the pure metal or any of its oxides with nitric acid. *Preparations.*—Solution in distilled water for 1x, using dilute alcohol for 1, and rectified spirit for all above; trituration. N.B.—These should be prepared by artificial light, and preserved in amber glass phials. *Dispensing forms.*—1x and 1, solution; 3x and upwards, tincture, tincture-trituration, pilules, or globules; or 1x to 3, trituration. Am.H.P.—Trituration, Class VII.

URTICA URENS. N.O. Urticaceæ. Small Stinging Nettle. Parts employed, the fresh herb when in flower, and seed, during the summer. *Preparation.*—Tincture, corresponding in alcoholic strength with proof spirit, Process I. *Dispensing forms.*— ϕ and upwards, tincture, tincture-trituration, pilules or globules. *Average loss of moisture, 79 per cent. Am.H.P.—Tincture of the entire fresh plant, Class III.

Ustilago Maydis. N.O. Fungi. Maize Smut. A fungus found growing on the Indian Corn, Zea Mays (Linn.). Parts employed, the fresh, just ripe fungus, gathered when it has turned black, but before the frosts have affected it. *Preparations.*—Trituration; tincture. Am.H.P.—Tincture of the fresh, just ripe fungus, Class IV. Trituration, Class VII.

UVA URSI. (Arctostaphylos Uva-ursi.) N.O. Ericaceæ. *Syn.* Arbutus Uva ursi, A. buxifolia. Bearberry. Habitat, dry, heathy and rocky hills, over a great part of central and northern Europe, Russian Asia, and northern America; Scotland, north of England, and Ireland. Flowering time, spring. Parts employed, the leaves, at the beginning of flowering. *Preparation.*—Tincture, corresponding in alcoholic strength with proof spirit, Process I. *Dispensing forms.*— ϕ and upwards, tincture, tincture-trituration, pilules, or globules. Am.H.P.—Tincture of the fresh leaves, Class II.

VALERIANA. (*Valeriana Officinalis.*) N.O. Valerianaceæ. *Syn.* *V. sylvestris* major, *Phu parvum*. Wild Valerian, Heal-all. Habitat, in moist situations and damp woods, over the whole of Europe and Russian Asia; successfully cultivated in North America. Flowering time, summer. Part employed, the root. Time for collecting, in the autumn, or at the beginning of flowering. *Preparation.*—Tincture, corresponding in alcoholic strength with proof spirit, Process I. *Dispensing forms.*— ϕ and upwards, tincture, tincture-trituration, pilules, or globules. Average loss of moisture, 55 per cent. Am.H.P. —Tincture of the dried root, Class IV.

Veratrinum. (Veratrine, or Veratria of the B.P.) An alkaloid obtained, in a somewhat impure form, from *Sabadilla*. A powerful poison. *Preparation.*—Solution in rectified spirit. Freely soluble in spirit, not soluble in water.

Veratrum. (*Veratrum Album.*) N.O. Melanthaceæ. *Syn.* *Helleborus albus*, *H. præcox*. White Hellebore. Habitat, pasture-lands in Alpine, Pyrenean, and other mountainous localities in Europe. Flowers June to August. Part employed, the root, early in June, before flowering. *Preparation.*—Tincture, using 20 O.P. spirit, Process I. *Dispensing forms.*— ϕ and upwards, tincture, tincture-trituration, pilules, or globules. Am.H.P.—Tincture of the dried root, Class IV.

VERATRUM VIRIDE. N.O. Melanthaceæ. *Syn.* *Helonias viridis*. American Hellebore, Green Hellebore, Itch-weed. Habitat, Canada to Carolina. Part employed, the root. Time for collecting, in the autumn. *Preparations.*—Tincture of the fresh root, imported from North America; tincture of the dried root, using 20 O.P. spirit, Process I. *Dispensing forms.*— ϕ and upwards, tincture, tincture-trituration, pilules or globules. Am.H.P. —Tincture of the fresh root, Class III.

VERBASCUM. (*Verbascum Thapsus.*) N.O. Scrophulariaceæ. *Syn.* *Thapsus barbatus*. Great Mullein, Long Taper. Habitat, roadsides and waste places all over Europe and temperate Asia; also in North America.

Flowers during summer. The fresh herb is used for making the tincture ; should be collected at the beginning of flowering. *Preparation*.—Tincture, corresponding in alcoholic strength with proof spirit, Process I. *Dispensing forms*.— ϕ and upwards, tincture, tincture-trituration, pilules, or globules. Average loss of moisture, 74 per cent. Am.H.P.—Tincture of the fresh plant, Class III.

Verbena Hastata. (Ad.) N.O. Verbenaceæ. Blue Vervain, Ironweed. Grows profusely on the prairies and low bottom-lands all over the United States. Parts employed, the root or leaves. *Preparation*.—Tincture ; infusion for external application.

Veronica Beccabunga. (Ad.) N.O. Scrophulariaceæ. *Syn.* Veronica Americana. American Brooklime. Habitat, common in brooks and ditches in America. Flowering time, June to August. Part employed, the whole plant in the fresh state. *Preparation*.—Tincture.

VIBURNUM OPULUS. N.O. Caprifoliaceæ. *Syn.* V. Lobatum, Opulus glandulosus. Guelder Rose, High Cranberry. *Preparation*.—Tincture of the bark, proof spirit. Average loss of moisture, 47 per cent. Am.H.P.—Tincture of the fresh bark of the root, Class III.

Viburnum Prunifolium. (Ad.) N.O. Caprifoliaceæ, Black Haw. Habitat, dry copses, Connecticut to Illinois. Flowering time, May and June. Part employed, the bark. *Preparation*.—Tincture. It is nervine, antispasmodic, tonic, astringent, diuretic, and used in threatened abortion.

Vinca Minor. N.O. Apocynaceæ. Lesser Periwinkle. We use the fresh plant, making a tincture corresponding in alcoholic strength with proof spirit. Average loss of moisture, 70 per cent. Am.H.P.—Tincture of the fresh plant, Class II.

VIOLA ODORATA. N.O. Violaceæ. *Syn.* V. Martia. Sweet Violet. Habitat, Europe and Russian Asia ; common in Britain. Parts employed, the entire fresh plant when in flower, and young seed, in early spring. *Preparation*.—Tincture corresponding in alcoholic strength with proof spirit, Process II. *Dispensing forms*.— ϕ and upwards, tincture, tincture-trituration, pilules, or globules. Average loss of moisture, 77 per cent. Am.H.P.—Tincture of the fresh plant, Class III.

VIOLA TRICOLOR. N.O. Violaceæ. *Syn.* *V. arvensis*. Heart's-ease, Pansy. Habitat, hilly pastures and banks, cultivated and waste places throughout Europe and Russian Asia; abundant in Britain. Parts employed, the entire plant, when in flower, and young seed, from spring to autumn. *Preparation.*—Tincture, corresponding in alcoholic strength with proof spirit, Process II. *Dispensing forms.*— ϕ and upwards, tincture, tincture-trituration, pilules, or globules. Average loss of moisture, 73 per cent. Am.H.P. Tincture of the fresh plant, Class III.

Vipera. Short provings of the venom of several varieties of these reptiles have been made, including that of the common English viper, *Vipera berus* (*Daud.*). The venom from any variety may be collected as directed under **CROTALUS**. *Preparation.*—Solution in glycerine, as directed for **CROTALUS**.

VISCUM ALBUM. N.O. Loranthaceæ. Mistletoe. Habitat: parasitic on many trees, especially on the apple; extending over the whole of temperate Europe; common in southern, and especially western, England. Flowers in spring. Parts employed, leaves and berries in equal quantities, collected when the berries are ripe. *Preparation.*—Tincture, corresponding in alcoholic strength with proof spirit. This tincture is difficult to make, owing to the viscosity of its sap; hence the following modification of the usual process must be had recourse to:—Cut the leaves small, pass through the mincing machine, then bruise, and pass through the machine a second time. Mash up the berries and bruised leaves, and again pound and pass through the machine. Then add to the magma an equal bulk of finely-powered glass. Mix well together, and pack carefully in the percolator in thin layers of about $\frac{1}{2}$ inch or $\frac{3}{4}$ inch in thickness, adding a little finely-powered glass between each, and shaking it well into the interspaces. Proceed in other respects as usual in the case of fresh plants. Average loss of moisture, 69 per cent. Am.H.P.—Tincture of the fresh berries and leaves, Class III.

Weythia Helenoides. (Ad.) Found in California. It acts on the brain and nervous system, the mucous membrane of the throat and bronchi. Part employed, the root, green. *Preparation.*—Tincture.

Wiesbaden. This "Simple Muriated Thermal" water has been proved.

Woorali. See CURARE.

XANTHOXYLUM. (Xanthoxylum Fraxineum.) N.O. Xanthoxylaceæ. *Syn.* X. Americanum, X. fraxinifolium, X. ramiflorum, X. mite. Prickly Ash, Toothache-tree. Habitat, Canada to Virginia, and west to the Mississippi. *Preparations.*—Tincture of the bark, using rectified spirit; tincture of the ripe berries, using rectified spirit; Process I. in either case. *Dispensing forms.*— ϕ and upwards, tincture, tincture-trituration, pilules or globules. Am.H.P.—Tincture of the fresh bark, Class III.

Zinci Bromidum. (Ad.) (Bromide of Zinc.) *Homœopathic preparation.* Solution in distilled water. Ordinary dose, 2 grains, three times a day. Solubility 2 in 1 of rectified spirit, very soluble in water.

Zinci Sulphocarbolas. (Ad.) (Sulphocarbolate of Zinc.) $\text{Zn}(\text{C}_6\text{H}_5\text{SO}_4)_2, \text{H}_2\text{O}$. of the B.P. where see characters and tests. Solubility, 1 in 2 of water, 1 in 3 of rectified spirit.

ZINCUM. (Zinc, Zn.) Pure re-distilled metallic zinc, reduced to powder by rubbing it in a mortar under distilled water. The purity of the metal should be first ascertained by the following (B.H.P.) characters and tests:—"A bluish-white metal, which soon tarnishes in the air, and exhibits a crystalline fracture; fuses at about 773° , and volatilizes at a bright red heat. Soluble without residue in dilute sulphuric acid, forming a colourless solution which, when sufficiently acid, gives no precipitate with sulphuretted hydrogen. The solution, after it has been boiled for a few minutes with a little nitric acid, yields with ammonia a white precipitate which is entirely soluble without colour in an excess of the reagent, and the resulting solution gives a white precipitate with sulphide of ammonium." *Pre-*

paration.—Trituration. *Dispensing forms.*—1x to 3, trituration only ; 4 and upwards, tincture, tincture-trituration, pilules, or globules. Am.H.P.—Trituration, Class VII.

Zincum Aceticum. (Zincic Acetate, $\text{Zn}(\text{C}_2\text{H}_3\text{O}_2)_2 \cdot 2\text{H}_2\text{O}$.) *Syn.* Zinci acetas. Acetate of Zinc of the B.P., where see characters and tests. May be obtained from the operative chemist. Solubility 1 in 2 of water, 1 in 40 of rectified spirit. *Preparation.*—Solution in distilled water for 1x, using distilled water to which 5 per cent. of rectified spirit has been added for 1, dilute alcohol for 3x and 2, and rectified spirit for all above. B.P. dose, 1 to 2 grains as a tonic ; 10 to 20 grains, as an emetic. Am.H.P.—Trituration, Class VII.

Zincum Carbonicum. (Carbonate of Zinc, $\text{ZnCO}_3(\text{Zn}2\text{HO})_2, \text{H}_2\text{O}$.) *Syn.* Zinci carbonas. For characters and tests see B.P. *Preparation.*—Trituration. Insoluble in water. B.P. dose, 2 to 10 grains. Used chiefly in the preparation of other salts of zinc. Am.H.P.—Trituration, Class VII.

Zincum Cyanatum. (Zincic Cyanide, $\text{Zn}(\text{CN})_2$.) *Syn.* Zinci cyanidum, Zincum hydrocyanicum. *Preparation.*—Trituration. All preparations of cyanide of zinc should be freshly made. Am.H.P.—Trituration, Class VII.

Zincum Iodatum. (Zincic Iodide, ZnI_2 .) *Syn.* Zinci iodidum. *Preparation.*—Solution in syrup for 1x and 1, using equal measures of syrup and distilled water to which 5 per cent. of rectified spirit has been added for 3x, dilute alcohol for 2, and rectified spirit for all above. Am.H.P.—Trituration, Class VII.

Zincum Muriaticum. (Zincic Chloride, ZnCl_2 .) *Syn.* Zinci chloridum. Chloride of Zinc. For characters and tests see B.P. *Preparation.*—Solution in distilled water for 1x, using dilute alcohol for 1, and rectified spirit for all above. Solubility, 10 in 4 of water, freely in rectified spirit.

ZINCUM OXYDATUM. (Zincic Oxide, ZnO .) *Syn.* Zinci oxidum. Oxide of Zinc of the B.P. Insoluble in water. *Homœopathic preparation.*—Trituration. *Dispensing forms.*—1x to 3, trituration only ; 4 and upwards, tincture, tincture-trituration, pilules, or globules, B.P.

dose, 2 to 10 grains. Insoluble in water. Am.H.P.—Trituration, Class VII.

Zincum Phosphoratum. (Zincic Phosphide, Zn_3P_2 .)

Syn. Zinci phosphidum. Prepared by heating metallic zinc with phosphorus in a sealed glass tube, placed in an iron tube filled with magnesia, keeping it at a dull red heat for 8 to 10 hours. Insoluble in water and spirit. *Preparation.*—Trituration. Am.H.P.—Trituration, Class VII.

ZINCUM SULPHURICUM. (Zincic Sulphate, $ZnSO_4 \cdot 7H_2O$.)

Syn. Zinci sulphas. Sulphate of Zinc, White Vitriol. For characters and tests *see* B.P. *Preparation.*—Solution in distilled water for 1x; dilute alcohol must be used for 1 and 3x, 20 O.P. spirit for 2, and rectified spirit for all above. *Dispensing forms.*—1x to 3x, solution only; 2 and upwards, tincture, tincture-trituration, pilules, or globules. Solubility, 10 in 7 of water; insoluble in rectified spirit. B.P. dose, 1 to 3 grains as a tonic; 10 to 30 as an emetic. Am.H.P.—Trituration, Class VII.

Zincum Valerianicum. (Zincic Isovalerate, $Zn(C_5H_7O_2)_2$.)

Syn. Zinci valerianas. Valerianate of Zinc. For characters and tests *see* B.P. *Preparation.*—Trituration. Solubility, 1 in 120 of water; 1 in 60 of rectified spirit. B.P. dose, 1 to 3 grains. Am.H.P.—Trituration, Class VII.

ZINGIBER. (Zingiber Officinale.) N.O. Zingiberaceæ.

Syn. Amomum zingiber. Ginger. Habitat, Hindostan; cultivated in East and West Indies. Part employed, the scraped and dried rhizome, as imported. For characters *see* B.P. *Preparation.*—Tincture, using rectified spirit, Process I. *Dispensing forms.*—φ and upwards, tincture, tincture-trituration, pilules, or globules. Am.H.P.—Tincture of the dried root, Class IV.

THE END.

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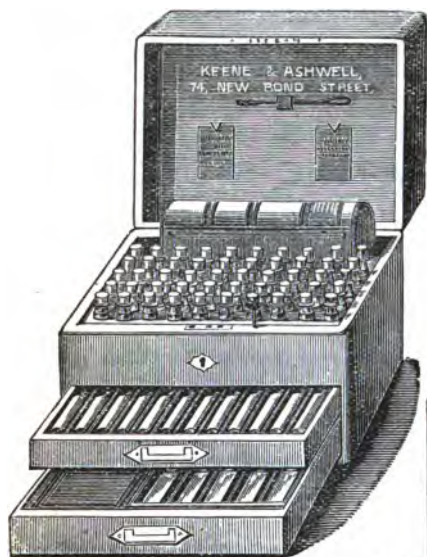
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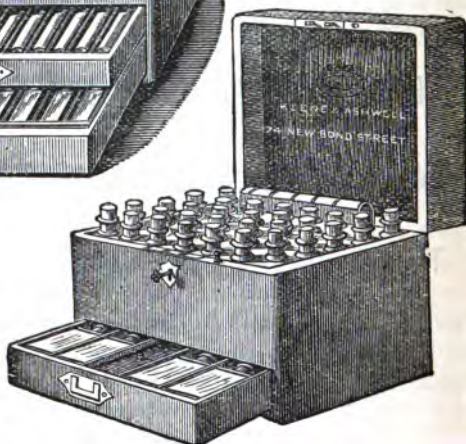
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